The impact of the Canterbury District Health Board structure on the efficiency and efficacy of clinical operations.

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Abstract

The impact of the Canterbury District Health Board structure on the efficiency and efficacy of clinical operations

Objectives:

The purpose of this study is to gain a better understanding of the level of satisfaction from the clinical teams within the Canterbury District Health Board of the CDHB structure and its impact on the efficiency and efficacy of clinical operations.

The objective of this research is to explore the healthcare system governance model in place for the CDHB and the clinicians' view of the system for this region, with particular reference to the four key questions asked from a clinical perspective.

- ***Should the system embrace greater centralisation or greater regionalisation?***
- ***Should the healthcare system be administered by a board or by management?***
- ***Should the administrative governance team be elected or appointed?***
- ***What degree of public participation should there be within the public healthcare system?***

These questions reflect the current stresses that affect the delivery of clinical services in the region. There are various factors affecting clinicians within the secondary healthcare sector. This paper reports on five critical influences on clinical practice and what effect they have on clinical operations: The Ministry of Health (MoH), the Canterbury District Health Board (CDHB) Board of Directors, District Health Board Management, the general public and other clinicians. Four pivotal overarching concepts relative to organisation structure serve as core organisational concepts: the administrative distinction between the Boards and management, elected versus appointed membership, centralised versus decentralised structure and the degree of public participation in determining clinical practice.

Methods: Semi-structured interviews with a mixture of Clinical Directors and academic Heads of Departments from Christchurch central hospital were used to collect data. All management level clinicians were approached and asked to participate. Out of 37 requests, 27 agreed to participate. As part of the interview, participants were asked to respond to both rating scale measures and open ended questions about the nature of their work with and evaluation of the CDHB and its impact on clinical practice.

Results: Clinicians saw public input to the CDHB as a having a positive effect, though the manner in which participation is achieved does not allow fair public representation. Management and clinicians are working closer together to effectively deliver healthcare for the region, though clinicians would like to have greater input on decisions at both management and Governmental levels. The impact the MoH has on clinical decisions is minimal yet clinicians would like more say in how the MoH makes those decisions. Rather than direct clinician input to MoH, there was a suggestion that the Council of Medical Colleges may be a better body to aid in the decision-making process for the MoH.

Conclusion: Though greater centralisation is taking place around certain aspects of healthcare, the regional system presently in place is viewed as preferable when compared to a fully centralised system the like of the NHS from the United Kingdom. Public participation is seen by the clinicians as an important aspect of a public healthcare system and this is presently achieved through an elected member to the Board. The manner in which publicly elected members are selected is presently not providing fair representation of the general public, nor does it result in elected Board members having the required skill sets needed to govern a DHB. The governance role could be performed by a mixture of elected and appointed members, but should also have some input from a central healthcare body. The present move by the primary healthcare sector within Canterbury could be an area of further research as a way to improve public input while addressing a lack of strategic, financial and clinical governance leadership that has been raised by academics and the government.

Keywords: Boards or Management, Elected or Appointed, Centralisation or Decentralisation, Public Participation in Healthcare.

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Acronyms

AHB	Area Health Board
BMA	British Medical Association
BMJ	British Medical Journal
Can	Canada
CCDHB	Capital and Coast District Health Board
CCMAU	Crown Company Monitoring Advisory Unit
CD	Clinical Director
CDHB	Canterbury District Health Board
CERA	Canterbury Earthquake Recovery Agency
CEO	Chief Executive Officer
CHE	Crown Health Enterprise
CHL	Canterbury Health Limited
CHMSA	Christchurch Hospitals' Medical Staff Association
CMO	Chief Medical Officer
DGH	District General Hospital
DHB	District Health Board
DHSS	Department of Health and Social Security
GM	General Manager
GP	General Practitioner (Primary Care)
GPFH	General Practice Fund Holders (UK)
HO	House Officer
HPA	Health Promotion Agency
HQSCB	Health Quality and Safety Commission Board
TI	Trainee Intern (6^{th} and 7^{th} year of Bachelor of Medicine and Surgery)
MO	Medical Officer
MoH	Ministry of Health
MSA	Medical Staff Association
NHB	National Health Board
NHS	National Health System (UK)
NPM	New Public Management
NZBS	New Zealand Blood Service
NZMA	New Zealand Medical Association
NZNA	New Zealand Nurses Association
OECD	Organisation for Economic Co-operation and Development
PCG	Primary Care Group
PHARMAC	Pharmaceutical Management Agency
PHO	Primary Health Organisation
PPF	Public Partnership Forums
QIC	Quality Improvement Committee
RACS	Royal Australasian College of Surgeons
Reg	Registrar
RHA	Regional Health Authorities
RMO	Resident Medical Officer
RSA	Republic of South Africa
SMO	Senior Medical Officer
SRHA	Southern Regional Health Authority
STV	Single Transferable Vote
PMH	Princess Margaret Hospital
VA	Veterans Health Administration
WCDHB	West Coast District Health Board
WHO	World Health Organisation

Zim	Zimbabwe

Chapter 1

Introduction

New Zealand can trace the creation of a Hospital Board System back to the 1885 Hospital and Charitable Institutions Act (Dow, 1995). The Act stated that hospitals, managed by local boards, were to have sole "superintendence and control" of their institutions, while allowing boards to establish hospitals within their operational areas. The act was later amended in 1909 to say "control and management," and was expanded to include maternity and convalescent homes, as well as sanatoria and institutions setup for substance abuse (Laugesen & Gauld, 2012, p. 15).

The Board system stayed in place within New Zealand for close to 100 years, but came to an abrupt end when the National Party introduced The Health Reform Bill in July of 1991. This resulted in the scrapping of Boards, replacing them with acting commissioners, and the centralisation of the New Zealand Healthcare system. But this centralisation of New Zealand's Healthcare system lasted just under ten years before it too was replaced.

The present District Health Board (DHB) structure has been in place since the Labour-led coalition Government was elected to power in 1999 (Gauld, 2001). The coalition re-introduced public participation and involvement in the planning, governance and decision making process in the New Zealand healthcare system. Re-establishing Boards returned the New Zealand healthcare system to what had been characteristic of one of the oldest and longest established public healthcare systems. These changes re-established publicly elected Health Boards' governance of healthcare delivery and removed the changes that the National Government had put in place only eight years earlier (Laugesen & Gauld, 2012).

The coalition Government's move to reintroduce public health boards was an attempt to rejuvenate public involvement in the healthcare system, while at the same time regionalising a system that had been centralised under the previous National led coalition Government (King, 2001). This decentralisation and re-introduction of public involvement went further in that it also introduced funding accountability as well as reviewing how the principles of the Treaty of Waitangi could be represented in both the delivery of healthcare, and the management structure of the Healthcare System (King, 2001).

The public Boards were to be made up of eleven members; four were to be nominated by the Minister of Health and seven to be elected from the local community. Following on from the inclusion of the Treaty of Waitangi principles, the government legislated that two of the Board members must come from the local iwi and would be listed as Maori members (Laugesen & Gauld, 2012, p. 137). This system of governance has been in place now for over fifteen years.

Within the Healthcare structure of New Zealand, a DHB is responsible for a large variety of healthcare providers delivering care to the New Zealand general public. A fuller description along with a pictorial layout of the entire New Zealand healthcare system can be found in Section 3.3. A simpler definition of a DHB is summarised with the following statement from the Ministry of Health (2011) :

> District health boards (DHBs) are responsible for providing or funding the provision of health services in their district

This research is looking at the secondary healthcare system within Canterbury, New Zealand, but in doing so it does occasionally mention the primary healthcare sector. The following two quotes help to define the difference between these two healthcare sectors in New Zealand:

Definition of Secondary care:

> [M]edical care that is provided by a specialist or facility upon referral by a primary care physician and that requires more specialized knowledge, skill, or equipment than the primary care physician can provide ("Secondary Care, " 2016)

The following definition of primary healthcare is taken from the MoH web site:

> Primary health care relates to the professional health care provided in the community, usually from a general practitioner (GP), practice nurse, pharmacist or other health professional working within a general practice (Ministry of Health, 2014c)

1.1 Canterbury District Health Board

The Canterbury District Health Board (CDHB) is New Zealand's second largest health Board covering an area of 26,881 square kilometres and serving a population of just over 500,000 (Canterbury District Health Board, 2014a). It provides nearly 20 specialist services to the South Island, and four national or semi-national specialities.

To provide these services, the CDHB manages seven central hospitals, plus eight rural hospital facilities. While providing many of the secondary services from the hospitals and rural facilities the CDHB also runs a range of outreach clinics and community initiatives. Since 2015, the CDHB has taken responsibility for the delivery of healthcare services for the Chatham Islands, something that was previously provided by the Hawkes Bay DHB (Taylor, 2014).

The CDHB has partnerships with many other agencies including local councils, Canterbury Earthquake Recovery Agency (CERA), Police and Justice, Housing NZ and the Ministries of Education and Social Development (Canterbury District Health Board, 2014a). They provide planning and funding for health services in Canterbury other than those provided to secondary care institutions. With the working arrangement via the Otago School of Medicine, the CDHB is one of the main tertiary providers of hospital and specialist services for the South Island.

1.2 Clinical Efficiency

Questions around clinical efficiency and efficacy are being raised by hospital managers, healthcare policy makers and medical research workers (Edwards, Silow-Carroll, & Lashbrook, 2011). One reason for this is the fact that hospital costs have increased to crisis proportions (Blendon et al, 2002). Efficiency in a hospital service can be defined as the minimum set of inputs to produce successfully treated patients (Jon A Chilingerian & Sherman, 2004). Conversely, Cooper, Seiford, and Zhu (2011, p. 493) defined clinical inefficiency:

> Clinical inefficiency in the provision of hospital services occurs when a physician uses a relatively excessive quantity of clinical inputs when compared with physicians treating a similar case load and mix of patients.

Once the minimum number of inputs for successful treatment are defined, the level of efficiency for clinicians may be measured, and using these results allows for greater analysis to be undertaken on the spiraling cost of hospital management and productivity. Ellis and McGuire, 1986 as cited in Jon A. Chilingerian (1995, p. 549) put forward the following:

> inefficient physician decision making may be one of the root causes of runaway costs and low hospital productivity.

1.3 Justification of this study

There are very few studies that have looked at the role and significance of a publicly elected healthcare governance structure from the perspective of the clinician delivering the care to patients. This study has thus been designed to contribute to the literature on healthcare structure and its impact on clinical operations, as well as its relevance from a clinician's perspective. In today's healthcare system as hospitals become more centralised and ever more complex should the governance be performed by a Board many of whom do not have a clinical or healthcare related background, or by the management teams. Should a Board of governance be made up of locally elected members as a representation of the local population, or should these members by appointed from the best people capable of performing such a role regardless of locality. Should healthcare offered to the New Zealand public become more centralised, along the lines of the NHS in the UK or is a regionalised system better for New Zealand? Lastly, to what degree should the public participate in a public healthcare system?

This research is likely to stimulate further discussions about public involvement in the governance and management of healthcare delivery and greater centralisation or decentralisation of New Zealand healthcare management. Findings from this study should allow for and generate additional research on management structures within the secondary healthcare system. The uses for, and methods of incorporating the public into the operation of the New Zealand healthcare system. As well as the impacts that greater or lesser centralisation of services can have on healthcare delivery.

Regarding the administrative running of the healthcare system, a board structure for management raises many as yet unanswered questions about the ability of boards to perform to the standards required to govern what is seen as the largest employer in Christchurch, as well as one of the more complex and costliest organisations in New Zealand. Whether boards should be elected or appointed, depends on the intended role of the board. If the role is to gain public representation, then this may require some form of public election for the board members. For the smaller DHBs within New Zealand, having a limited population may result in few people on the board with the skills required to perform the roles when putting themselves forward in the election process. This in turn may leave the DHB management in a position of isolation while the DHB has to engage training for those board members before they are able to offer any governance direction and support.

Much of the literature focussed on healthcare structure provides mixed views but no definitive solution to the question of centralisation or regionalisation for healthcare delivery (Rico & Léon, 2005). If the healthcare system was centralised there would be no need for locally elected boards,

but their elimination may result in the loss of public involvement in the running and management in what is seen as a public healthcare system.

1.4 Research Objective and Questions

The objective of this research is to explore the healthcare system governance model in place for the CDHB and the clinicians' view of the system for this region. The four key questions noted below cannot be answered directly, though the purpose of this study is to gain a better understanding of the level of satisfaction from the clinical teams at Christchurch hospital with the CDHB Board, the CDHB structure and its perceived impact on the efficiency and efficacy of clinical operations. The conclusion of this research will report on what the clinicians said regarding these questions:

- ***Should the system embrace greater centralisation or greater regionalisation?***
- ***Should the healthcare system be administered by a board or management?***
- ***Should the administrative governance team be elected or appointed?***
- ***What degree of public participation should there be within the public healthcare system?***

These questions reflect the current stresses that affect the delivery of clinical services in the region. There are several reasons why the present setting, Christchurch, is appropriate for investigating the role and performance of the DHBs. The CDHB is the largest of the DHBs within the South Island. It is the second largest in New Zealand and has the widest range of services available to the public of the South Island. Because many of the speciality services cannot be operated fully outside of Christchurch, many of the Senior Medical Officer (SMOs) run outreach clinics for the smaller DHBs. As they often operate outside the CDHB boundaries, these clinicians are in a good position to review the structure and its effect on clinical efficiency and compare this to other DHBs in New Zealand. For many, this comparison can be expanded to include other healthcare structures and systems they have worked in around the world.

The relationships amongst the various health care stakeholders in New Zealand can be presented pictorially. Five central stakeholder groups were identified, each with some ability to affect clinical operations. These were: The Ministry of Health (MoH), the DHB Board of Directors, the DHB Management, the public and clinicians. The relationships amongst these are graphically presented in Figure 1 below.

Figure 1 - Influences on Clinical Operations

The viewpoints of clinicians as stakeholders within the healthcare system were collected and analysed. This information was then sorted into the following four areas of concern:

- Boards or Management
- Elected or Appointed
- Centralised or Decentralised
- Public Participation

Once the information was sorted into the four areas of concern, it was again analysed with the intention of answering the thesis questions outlined above.

1.5 Research Approach

A case study of the clinicians at Christchurch Hospital, Canterbury, New Zealand was undertaken. The format used in this thesis was semi-structured in-depth interviews with both quantitative and qualitative questioning, yielding both numeric data and verbal interviewee responses. This approach was used to allow participants to focus on specific topics, yet still enabling them to provide some degree of depth in their responses. The questionnaire was created and split into six sections, five core influences affecting clinical practice, and the final section asking demographic and personal questions. Those sections were:

- CDHB Board and your relationship with members
- CDHB Management
- The Ministry of Health
- Public engagement
- Your experiences of different Health models
- Personal question

The interviews were spread over a number of weeks and were conducted by the author.

1.6 Thesis Outline

This thesis is organised into six chapters. Chapter one introduces the basic outline for this research, the justification, objectives and thesis questions posed. It defines the approach that will be taken and outlines how that will be reflected upon within this document.

Chapter Two introduces the healthcare system within New Zealand, how this came about, and some of the changes the New Zealand healthcare system has undergone over the past 100 years. It looks in greater detail at the two major healthcare reforms, the first being the 1991 Healthcare Reform Bill that centralised the healthcare system and removed public Boards. The second of these, the Health and Disabilities Act in 2000, reintroduced regionalisation and returned public Boards to the governance role of DHBs.

Chapter Three goes on to discuss New Zealand's healthcare structure, breaking this down into two main areas; structures within the secondary healthcare system and the many different facets within this, and the encompassing healthcare structure within New Zealand.

Chapter Four expands on qualitative and quantitative research, content analysis and structured interviews, the interview layout, the interview schedule and the selection and size of the group of

clinicians selected for interviewing. It explains both the development of the interviews as well as the questionnaire used in the interviews and how this was amended after a trial was run in one of the hospital departments. An analysis was also done on the CDHB board meeting minutes so there is a section covering why and how this was performed.

Chapter Five first analyses the CDHB board meetings, then gives a breakdown of the main questionnaire results in the six segments from the questionnaire: The CDHB Board and clinicians relationship with members, CDHB management, The Ministry of Health, Public engagement, Clinicians experience of different health models and personal questions.

Chapter Six discusses the key findings of this thesis and sets out the conclusions and implications based on the results presented in Chapter Five. This is split back into the four segments matching the four thesis questions: Boards or Management, Elected or Appointed, Centralised of Decentralised and Public Participation. The summary then goes on to answer the thesis questions, while the final segments note the contribution this thesis makes to the literature, the limitations of the study and areas of further research.

Chapter 2

History of Healthcare in New Zealand

2.1 Introduction

This chapter provides a historical overview of public healthcare within New Zealand since its creation with the Hospitals and Charitable Institutions Act 1885. It goes on to highlight some of the changes to the healthcare system and what impact these had on the healthcare structure and organisation. An understanding of the current situation of the District Health Boards, and how this impacts the efficiency and efficacy of clinical operations requires an examination of the history of the DHB structure in New Zealand. This goes back to the very foundation of public healthcare in New Zealand in 1885 and why New Zealand felt a need to introduce such a structure.

Two major changes are considered. First, the move from a regionalised organisation to a centrally managed system. Second, the reversal of the centralisation and the re-introduction of a regional organisation of healthcare with public engagement in the form of Boards of Governance for each of the District Health Boards. Between these two changes, there was a period at the CDHB that has been referred to as "the Bad Old Days" (Anonymous Healthcare Worker #1, 2015), where amendments to the clinical practices at the Christchurch hospital resulted in the deaths of three patients.

2.2 Historical Overview

For much of the early 19th century, healthcare within New Zealand was a mixture "old wives' tales"; home remedies mixed with folk and patent medicines. A visit to a Doctor was for many a rare event and treatment would often be given to family members, children and neighbours by women (usually) who were seen as having healing skills of sorts, much of which may have been learnt through midwifery. In comparison, doctors (the vast majority being male) owing to their educational or social status, may only have been summoned to help ease the pain of the dying.

With improvements to medicine in the later part of the 19th century, and the establishment of the Otago Medical school in 1875, doctors started to take a greater role within healthcare delivery. Local hospitals became more popular as common standards of practice amongst medical practitioners were applied. In 1886 The New Zealand Medical Association was created and referred to as the New

Zealand branch of the British Medical Association. Yet the birth of the New Zealand National Health System can be seen as in 1900, with the introduction of the Public Health Act. This article of legislation removed responsibility from local authorities to a new Department of Public Health (Ministry for Culture and Heritage, 2014a). It was not until New Zealand suffered its worst disease outbreak in the flu pandemic of 1918, resulting in the death of over 8,600 people (Ministry for Culture and Heritage, 2014b), that a coordinated response to national healthcare was created. In the two months between October and December 1918, New Zealand lost half as many people to influenza as were killed during the entire period of The First World War (Ministry for Culture and Heritage, 2014b). At the time the public of New Zealand sought answers to this crisis, and the government responded. The acting Chief Health Officer, Robert Makgill, was key to developing and implemented the 1920 Health Act that was described as "the most useful legacy of the pandemic" (Rice & Bryder, 2005). Rice and Bryder went on to say that this legislation designed by Robert Makgill:

> ... was so well drafted that it survived with only minor amendments until the 1956 Health Act, which itself still followed the general pattern of the 1920 Act. At the time it was widely recognised as a model piece of health legislation, said to be the best of its kind in the English language.

The following statement is taken from a speech given by the Minister of Health, The Honourable James Alexander Young, in 1926.

> Our hospital Board system has been described as being politically controlled... It is public control by elective Boards under departmental supervision and assistance. It is a true expression of our democratic free institutions. ("Defended by Minister", 1926)

The visionary principles of the New Zealand healthcare system were later defined within the Social Security Act 1938:

> [H]ealthcare access should be universal and free from financial and other barriers, that all New Zealanders should have equal access to the same standard of treatment, and that the health system should be integrated and preventive rather than curative in focus (Gauld, 2014).

Since 1885, when the Hospitals and Charitable Institutions Act was enacted, allowing Boards to establish hospitals in their districts, the basic structure of partially appointed and partially elected hospital governance boards has remained largely intact (Laugesen & Gauld, 2012). This is not to say various governments have not tried to overturn the public Board structure. Table 1 is extracted from

Laugesen and Gauld and shows various re-structures and reforms going back to the 1920s, where the plans were very often aimed at overthrowing the publicly elected board governance system, and centralising the many smaller, rural hospitals that had developed around New Zealand (Laugesen & Gauld, 2012)

Table 1 – Major Health System reforms

Reform Period	Policy Recommendations	Outcome
1928 to 1932	A Board of Hospitals to manage the hospital system	No Policy Changes
1935 to 1942 Social Security Act	Health benefits for primary and hospital care, plus minor changes to hospitals.	Laissez-faire hospital financing policies
1952 to 1953 Commission on Hospital reform	Boards to be split into appointed and elected. Introduction of five regional Health Authorities.	1957 legislation did not change hospital governance
1971 – 1972 Royal Commission on Hospital Services	Abolishment of the Royal Commission	A change in Government resulted in the abolishment of The Commission
1972 to 1975 Labour Caucus Committee	Amend / remove the elected representation of hospital Boards, introduction of Regional Health Boards	No policy changes
1976 to 1984 Special Advisory Committee on Hospital System Organisation	Amend / remove the elected representation of hospital Boards, introduction of Regional Health Boards	Voluntary regionalisation policy
1986 to 1987 Health Benefits Review	The introduction of regional Area Health Boards	No direct policy changes
1987 to 1990 Hospital and Related Services Taskforce	Six regional Health Authorities, elected members on the Boards, introduction of competition for provisioning, internal market.	Indirectly lead to the 1989 Area Health Boards Act, restructuring down from 29 Boards to 14
1991 to 1993 Health Services Taskforce	The removal of Area Health Boards, the removal of elected health governance Boards, the Introduction of competition for provisioning and financing.	Elected governing Boards were abolished. Internal markets were created. Four regional purchasers and one national purchaser were created.
1996 to 2000	Coalition Government agreement introduces a process for a single national Health Funding agency.	Remove commercialisation of healthcare, and re-introduce regionalisation of healthcare management
2000	Introduction of District Health Boards. Reintroduce elected healthcare governance. Local DHBs to be responsible for planning and purchasing.	Creation of DHBs, publicly elected healthcare governance model.

(Laugesen & Gauld, 2012, p. 14)

Table 2 shows how the amendments and changes to the New Zealand healthcare structure have reduced the number of healthcare providers from 46 in 1925 to 20 in 2010, representing some centralisation of healthcare. The table also links the time periods to specific Health reform.

Table 2 – Number of Healthcare Boards over time

Number of Healthcare Boards in NZ	Year	Health reform
46	1925	
45	1935	Social Security Act
42	1940	
37	1951	Hospital Reform Commission
37	1960	
31	1970	Royal Commission & Labour caucus committee
29	1975	Special Advisory committee
29	1980	
29	1985	Health Benefits Review
29	1988	Hospital Taskforce
14	1989	
23	1991	Health Service Taskforce & Health Funding Agency
21	2000	Creation of DHBs and elected representation for Boards
20	2010	

(Laugesen & Gauld, 2012, p. 17)

During the past 100 years of reform to the healthcare structure, there is little evidence that any of these changes have been initiated from the bottom upwards. In this case the "bottom" would be the healthcare professionals and consumers of the health system in New Zealand (Bloom & Guest, 2001). The New Zealand Medical Council have supported the reduction of Board numbers even though they have been very vocal in their disagreement with the government regarding the methods and changes forced on the health system over the last century (Laugesen & Gauld, 2012).

In the United States of America (USA), the Kaiser Permanente organization of California has a resident population of 8.7 million people (Gauld, 2001). Yet New Zealand, with a population of just over 4.4 million people (Statistics New Zealand, 2013) has 20 secondary healthcare systems, all of which need to maintain a full board and management structure, yet only four of these districts (Waitemata, Auckland, Counties Manukau and Canterbury) have populations in excess of 400,000 residents. The DHB population figures for New Zealand are displayed in Table 3.

Table 3 – District Health Board by population

Healthcare Area	Population
Waitemata	525,555
Canterbury	482,178
Counties Manukau	469,293
Auckland	436,341
Waikato	359,310
Southern	297,423
Capital and Coast	283,704
Bay of Plenty	205,995
Mid Central	162,564
Hawkes Bay	151,692
Northland	151,692
Hutt Valley	138,378
Nelson Marlborough	136,995
Taranaki	109,752
Lakes	98,187
Whanganui	60,120
South Canterbury	55,626
Tairawhiti	43,653
Wairarapa	41,112
West Coast	32,148
Outside a DHB	324

(Statistics New Zealand, 2014)

The low population for many of the smaller DHBs is problematic. In the UK this has been identified as one of the key factors in a lack of board members with the desired skills, competencies, experience, knowledge and ability to represent their local constituency (Barnes, Newman, Knops, & Sullivan, 2003). Over the last decade, the National Health System for the UK has tried to increase public participation in decision making and planning. Yet the experience of the Primary Care Groups (PCGs) points to an overall lack of guidance provided by many public boards regardless of the members' diverse backgrounds or experience, which ultimately results in uncertainty (Rowe & Shepherd, 2002). The New Zealand MoH has noted concerns about the capacity of DHB Boards to govern effectively, with particular emphasis given to members not having the required skills to drive performance improvements, especially financial performance (Birchfield & Mueller, 2010). Within Canterbury, this lack of experience in the areas of leadership, financial, healthcare and strategic

planning for Canterbury's largest employer, is leaving the CDHB in a position where the Board is seen as unable to drive the innovation. These innovative ideas are needed to help the CDHB grow in this important phase of re-construction since the earthquakes left so many healthcare facilities beyond repair. This lack of ideas and vision has been raised by Laugesen and Gauld (2012, p. 150) who goes on to highlight the vacuum DHB management teams work in as Boards are not in a position to offer the guidance expected from them:

> [C]hief executives say that they often work in a vacuum; having to educate the Board about issues facing the DHB, while making decisions that the Board is not adequately equipped to discuss in any depth (Laugesen & Gauld, 2012, p. 150).

With all the discussions around centralised or decentralised governance for the health system, there is no definitive study of public participation in a health system showing either the costs or benefits of any local input (El Ansari & Andersson, 2011).

2.3 Centralisation: The Healthcare Reform Bill 1991.

In politics, the year 1991 marked a significant shift in how the health care system was viewed. After close to 100 years of public involvement in the country's healthcare service, Boards were removed and replaced with acting commissioners. The changes to the healthcare system implemented by the National Government in 1991 went further than just centralising healthcare management, introducing market oriented reforms, and thereby challenged the long accepted values of a freely accessible public health system and the underlying assumption of a universal healthcare structure (Laugesen & Gauld, 2012, p. 120).

The Right Honourable Simon Upton, Minister of Health, introduced the Health Reform Bill on the 30th of July with the following opening statement:

> The health system is unfair. It discriminates between victims of accidents and illness, between those using primary care systems and those using secondary care services, and poses significant access difficulties for those on modest to low incomes. It is also inefficient. There are perverse incentives that lead to cost-shifting. There is evidence that capital investments are being run down because of the reluctance to take urgent decisions, and there is a duplication of effort among the public sector, the private sector and voluntary sectors. On the other hand, we have a pool of talented health professionals who, given the chance, are capable of providing even better healthcare to the population at large (Molteno, 1991)

The required three readings of the Healthcare Reform Bill ("How a bill becomes law," 2016) took place in the House on the 30th and 31st of July 1991. A range of issues featured repeatedly in the discussions. These topics and their frequencies of occurrence in the debates are presented in Figure 2.

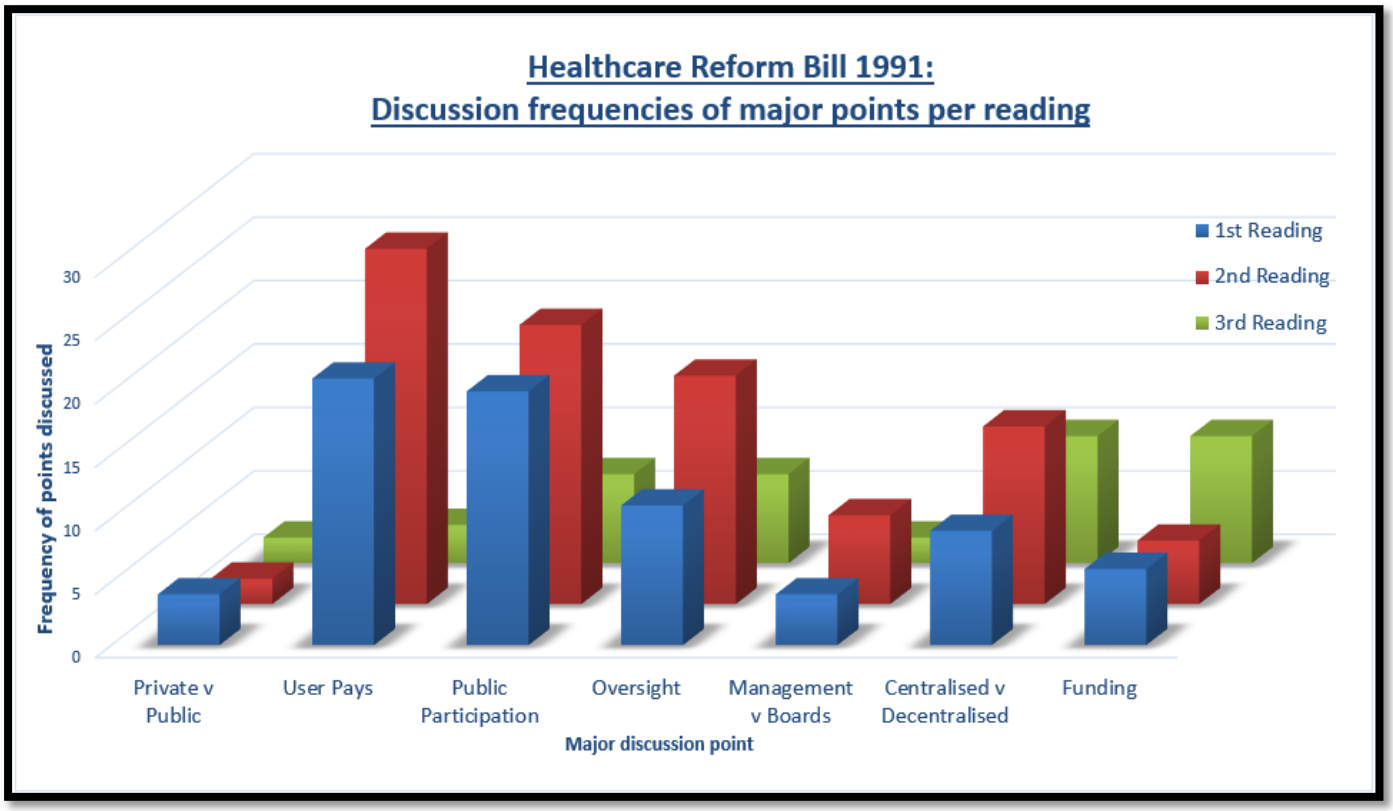

Figure 2 – Discussion frequency of major point in the Healthcare Reform Bill 1991 readings [1]

The five main points of discussion from the 1991 Healthcare Reform Bill readings shown in figure 2 were:

1. The introduction of "user-pays" for a national healthcare system. The opposition benches argued that introducing any form of user pays to a National healthcare system would see healthcare becoming unavailable due to cost for those in the lower end of the socioeconomic scale, and go against the concept of the public healthcare system introduced in 1885. Yet National argued that the cost of healthcare on the nation was something that should be shared with those that could afford to pay. The increased cost of healthcare, of

[1] Data from parliamentary minutes were analysed and coded following the content analysis method (Krippendorff, 2012; Lieblich, Tuval-Mashiach, & Zilber, 1998; Schwartz-Ziv & Weisbach, 2013). From the initial analysis, the health reform discussions were separated into 23 segments. A second analysis produced seven main areas. These were Private versus Public, User Pays, Public Participation, Oversight, Management versus Boards, Centralised versus Decentralised and Funding.

medications and the complexity of treatment plans was resulting in spiralling costs, and some of those costs could and should be shared with the public when and where possible.

2. Public participation. The opposition asked how, with a centralised system and the removal of public interaction through the Boards, could healthcare be classified as a public healthcare system? The perception must now be that of a wholly government run system, centralised and managed from Wellington, offering healthcare to the public of New Zealand, but with no public input or participation on how the system was to be delivered or managed.

3. Oversight. Covered the areas that included a lack of planning, lack of consent, lack of accountability, lack of select committee input, lack of submissions and a perceived lack of submission time. Many of these points were put forward by the opposition benches in an attempt to highlight how the government had overlooked what was seen as due diligence.

4. Centralisation versus decentralisation. Discussions on how the New Zealand healthcare system may become more aligned to that in the United Kingdom with a central healthcare system. The government put forward that centralisation was seen as a way to remove one layer of local bureaucracy while also allowing some form of central monitoring. The opposition benches countered these points saying centralisation would remove local control and reduce the ability of the local healthcare system to react to local issues and events. Centralisation would not be able to reduce the overall bureaucracy within the New Zealand healthcare system, this would only result in healthcare being bogged down in a central bureaucratic system that was unable to cope.

5. Funding. For such a shift in the overall concept of the New Zealand healthcare system, the opposition claimed that there was not enough money going into healthcare. That funding for the healthcare system was not adequate to provide the services that New Zealand's expected. The government put forward that these changes would generate saving within the system that would result more funding available to other areas of healthcare. The introduction of the provider and funder separation would allow greater commercialisation and competition within the system, which would again help to drive down cost and save money. The opposition benches countered this claiming that separation of the funder and provider would only create a situation resulting in spiralling cost.

2.4 The Bad Old Days at Canterbury Health Limited

Canterbury Health Limited (CHL) was one of the Regional Health Authorities (RHAs) operating within the Christchurch district, along with HealthLink South, during the centralisation of healthcare introduced in 1991. In August 1995, the CHL Board announced a restructuring of nursing staff that reduced the number of charge nurses employed at the Christchurch central hospital and planned to introduce case management for the remaining nursing staff. This would enable less experienced nurses to replace highly skilled nursing officers, providing they following the planned case management instruction books that were to be produced by CHL (Gowland & Bagshaw, 2013). In September of the same year, the Canterbury Association of Physicians wrote an open letter to *The Press* expressing their concern over the nursing restructure (Loaefa, 1995). Thus, began a very public disagreement between the hospital clinicians and the management and Board of CHL. In November, the Canterbury Association of Physicians again used *The Press* to publicly criticise CHL management for ignoring the clinicians' professional advice. They stated that the clinicians had lost confidence in the chairman of CHL, Mr. Brent Layton, the Chief Executive Officer Mr. Ian Frame and the general manager of Christchurch hospital, Mr. John Coughlin.

> This Association has lost confidence in Dr Brent Layton, Chairman of Canterbury Health, and his Board because of their failure to obtain the funding necessary for this tertiary and training centre to maintain its clinical services to the people of Canterbury…We have also lost confidence in [Chief Executive] Mr. Ian Frame and his management group who proposed major changes which will have a deleterious effect on the delivery of clinical care in Christchurch and now plan to implement them irrespective of "consultation"… The Board and management have imposed an approach to planning which ignores health professional advice, has undermined standards and morale, involves the suspension of services and is not in the best interests of the provision of health care in Christchurch (Loaefa, 1995).

Over the next four months letters were published from the Board Chairman, Mr. Brent Layton, publicly rejecting the claims put forward by the Canterbury Association of Physicians, and hospital medical staff voicing their concerns over the proposed staffing changes (Gilling, 1995). Table 4 on page 18 contains a summary of events from December 1995 to February 1997.

During these disputes between the clinicians at CHL and the management and Board, the deaths of three patients (Mr. Fonoti in October 1996, Mr. Gardiner in September 1996 and Mrs. Malcolm in June 1996) were used as an illustration of the inadequacy of the standard of care (Stent, 1998). The style of management at CHL was seen as being so caustic it created an environment of distrust which ultimately resulted in inappropriate standards of care for patients. As a result of this lack of co-

ordination and respect between management and clinicians, patients were unable to receive the appropriate quality of care required to save lives. This was especially true during the winter months of 1996, when a greater number of sick and elderly reported to the Emergency Department at Christchurch Hospital.

> The [Christchurch central] Hospital was so unsafe during the winter of 1996 it was a miracle that more people did not die ("A Damning Report," 1998).

The Commissioner of Health and Disabilities, Robyn Stent, was forced to run an official investigation into CHL after receiving numerous reports alleging unsafe practices at Christchurch hospital (Stent, 1998). This included a report from the The Christchurch Hospital Medical Staff Associaction (CHMSA) entitled "Patients Are Dying" (Christchurch Hospital Medical Staff Associaction, 1998). The Health and Disability commissioners' investigation was commissioned under the 1994 Health and Disabilities Act, and was subject to a judicial review in the Christchurch High Court in early March of 1997, which was later upheld. The commissioner's investigation was to consider whether the actions taken by Canterbury Health Limited during the winter of 1996 at the Christchurch central Hospital were in breach of the Code of Health and Disability Services Consumers' Rights with special emphasis placed on Right 4, the Right to Services of an Appropriate Standard. The Stent report was released by the Health and Disability Commissioner in 1998 and opened with the following comment:

> In my opinion certain actions of Canterbury Health Limited were in breach of the Code of Health and Disability Services Consumers' Rights 1(2), Right 4(1), Right 4(2), Right 4(5) and Right 10 of the Code (Stent, 1998, p. 77).

This statement was part of a hard-hitting report that went on to list over 65 recommendations for change that needed to take place within the Christchurch hospital. At the heart of the issues outlined by the report was the lack of leadership provided by both the management team and the Board of the Area Health Board. On this very point, Robyn Stent noted:

> In my opinion there was a lack of decisiveness and leadership at Canterbury Health… The Board should have recognised in 1995 that the Chief Executive could not lead the organisation through the change process (Stent, 1998, p. 93)

These comments were not reserved solely for management and the Board. She also went on to state the following regarding the clinical staff:

> Leadership has also not been demonstrated by some senior medical staff, despite their professional status (Stent, 1998, p. 93)

In 1997, the leadership and management structure for the Christchurch hospital was restructured for the third time in less than six years. These management changes were directly attributed to the lack of open communication between management and clinical staff, to a lack of a clear and decisive direction and actions and a lack of leadership with a sense and strength of conviction required to drive forward change (Stent, 1998). Not only was this loss of leadership evident in in the management of Christchurch hospital, but at the time of the "Patients Are Dying" report from the CHMSA, it was evident that it was also lacking from the Board of CHL (Stent, 1998). Stent went on to note the breakdown between management and clinical staff:

> As a result of this lack of co-ordination and respect between management and clinicians, patients did not receive appropriate quality care, particularly in the 1996 winter months (Stent, 1998, p. 86).

A summarized timeline of public events that led to a change in leadership of Christchurch Hospital is shown in the table below.

Table 4 - Summary of events from December 1995 to February 1997 (The Press)

December 1995	Over 60 medical staff members write to the Minister of Crown Health Enterprises and the Minster of Health expressing deep concerns about the loss of public confidence in Canterbury Health.
February 1996	The Royal Australasian College of Surgeons supports the Canterbury clinicians in the claim that restructuring poses a threat to patient safety.
April 1996	A poll of 155 Doctors showed over overwhelming support for the Surgeons' concerns over restructuring.
May 1996	Chairman of the Crown Health Association Mr. Brent Leyton rejects the idea of a clinical Planning and Policy Committee put forward by the Medical Staff Association.
July 1996	An advertisement in The Press reads: "Who do you want to make decisions about your medical care ... A Doctor of Medicine or a Doctor of Economics?"
July 1996	Chief Executive Officer Mr. Ian Frame resigns
October 1996	Chairman of the Crown Health Association Mr. Brent Layton resigns
February 1997	Christchurch Hospital General Manager Mr. John Coughlin resigns (Gilling, 1996a, 1996b, 1996c, 1996d, 1996e, 1996f, 1996g, 1996h, 1996i, 1997a, 1997b)

2.5 De-centralisation: New Zealand Health and Disabilities Act, August 2000

One of the many new policies introduced by the Labour-led Government was the reorganisation of the healthcare system. Annette King, Minister of Health, introduced the New Zealand Health and Disabilities Act to the House on the 17th August 2000 with the following statement:

> Today is a historic day for New Zealand health, because it marks the formal beginning of a return to a genuine public health service for this country. I am proud to be the Minister of Health in a Government that is determined, through this bill, to restore public ownership of the health system. That said, the enormity of the job ahead in creating a health service that New Zealanders can trust again cannot be overestimated (Molteno, 2001)

After nearly ten years of a centralised government administered healthcare system without public boards, the healthcare service of New Zealand was regionalised with each region governed by a board of eleven members, made up of seven publicly elected and four government appointed board members. A range of issues within the three readings of the Health and Disabilities Act in the House of Parliament on the 17th of August, the 23rd November and the 7th of December 2000 featured repeatedly. These frequencies of occurrence in the debates are presented in Figure 3 in the same manner as the 1991 Healthcare Reform Bill from Figure 2.

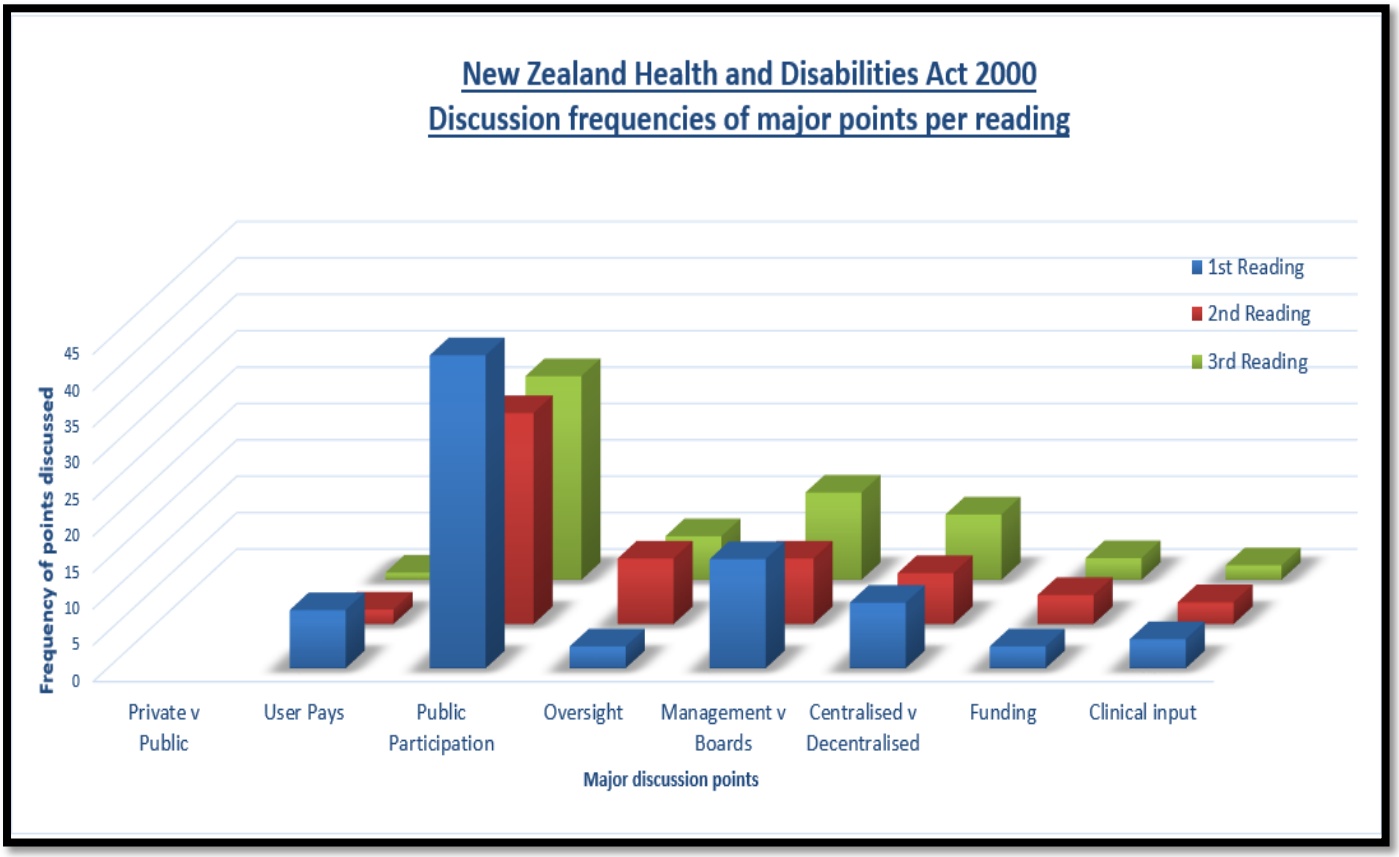

Figure 3 - Discussion frequency of major point in the Health and Disabilities Act 2000 readings [2]

The main points of discussion from the New Zealand Health and Disabilities Act readings shown in figure 3, public participation was again the central topic of discussion. In contrast the topic of user-pays was raised in the first reading, but received very little attention in the second and third readings as Public participation, management v Boards, Oversight, Centralisation v Decentralisation, funding and clinical input raised more discussion points. Much of the discussions were similar in context, for example funding for the change was seen as a way to divert money away from clinical need, yet the change to the healthcare system was seen by the government as a way to improve the financial situation of healthcare as a whole. Management versus Boards along with centralised versus decentralised and Oversight were again similar to the discussions in 1991. One area that was not noted in the discussions in 1991 was Clinical input. The return to a decentralised healthcare system was seen as a way to re-engage clinicians with healthcare management, but this was tempered with the opposition benches highlighting a possibility of confusion in healthcare accountability. In a new

[2] As above, data from the parliamentary minutes were analysed and coded following the content analysis method (Krippendorff, 2012; Lieblich et al., 1998; Schwartz-Ziv & Weisbach, 2013). From the initial analysis, the health and Disabilities Act discussions were separated into 23 initial segments; these were reduced to eight main areas: Private versus Public, User Pays, Public Participation, Oversight, Management versus Boards, Centralised versus Decentralised, Funding and Clinical input.

regional system with a Board, management and clinical input, who would ultimately be accountable and who are they accountable too. Overall, the two-main points within public participation centred around scaremongering tactics from the opposition benches and the reintroduction of fairness for all New Zealanders put forward by the government. The introduction of the Health and Disabilities Act allowed the government to introduce Maori representation within the Boards, as well as encompassing Treaty of Waitangi principles allowing greater cultural awareness within healthcare delivery. The government legislated that two of the Board members must come from the local iwi and would be listed as Maori members (Laugesen & Gauld, 2012, p. 137). The rationale for decentralising the health system was the same message used for the past 100 years: Local decision making structures facilitate closeness to the community (Gauld, 2001).

Many of those opposed to the centralised structure claimed that for the NHS centralisation had failed to provide the feeling of community-led healthcare, providing for the community's needs and allowing for community input to the decision making process (Barnes et al., 2003; Pfeffer, 1995) and this was not something New Zealand should emulate. The new healthcare policy envisioned a national healthcare system led by the public sector and based on a philosophy of cooperation where health system relationships should encourage patient and community-centred behaviour (Segall, 2000).

By decentralising the New Zealand healthcare system and introducing democratisation the regional healthcare system would be accountable to the local resident population. Within New Zealand, however, this is not the case as the Boards are in the first instance fully accountable to central government, yet it is the appearance of a democratic system that was seen as being important to the local population of New Zealand (Laugesen & Gauld, 2012, p. 165). This raises the question of whether the local elected board is nothing more than a rubber stamping forum for centralised government and that it does not represent the needs of the local population (Laugesen & Gauld, 2012, p. 141).

2.6 New Zealand Healthcare system post the Health and Disability act

Greater involvement of hospital clinicians has encouraged a much greater emphasis on both clinical governance as well as greater clinical leadership. Both themes are central to the report from a Ministerial Review Group to the Minister of Health 2009 (Horn Report, 2009). This report made the following recommendations centred around nine key themes

1. New models of care which see the patient rather than the institution at the centre of service delivery and which aim to promote a more seamless patient journey across community, primary, and hospital sectors, greater use of primary and community care, and the shifting of care "closer to home".

2. Stronger clinical and management partnerships to ensure that doctors, nurses, and other health professionals play a key role in decision-making.

3. A sharper focus on patient safety and quality of care to ensure better results for patients and more services for the resources that are available.

4. Identifying the services people need to bring a more measured, safer and more nationally uniform approach to the introduction of new medical technology and new clinical procedures.

5. Putting the right services in the right place by ensuring that the sector is configured – nationally, regionally, and locally – to best meet the needs of New Zealanders.

6. Ensuring the right capacity is in place for the future by improving structures and processes for workforce, capital, and IT planning and funding.

7. Building a sustainable workforce to ensure that we have planned and developed a workforce that meets our future needs.

8. Shifting resources to the front-line by reducing the cost of "back office" shared services for DHBs and reducing the duplication of functions carried out across the country.

9. Improving hospital productivity by reducing the variation in clinical and financial performance within and between hospitals, so they can do more with the resources available to them (Horn Report, 2009, p. 4).

To help achieve the goals put forward in the Ministerial Review, the government set up the National Health Board (NHB) in 2009. This agency operated independently from both central government and the Ministry of Health, having its own Chief Executive and a separate governing board made up of a mix of general practitioners, senior physicians and nursing representatives from around the country, along with two experienced members from the business community. Though the NHB was created to operate outside of government, up to half of the staff taken on at the new NHB were serving

members of the MoH. Even though the NHB was a separate entity from the MoH, it still took its direction in the same manner as the DHB Boards, so its independence can be questioned in the same manner as the Boards of the DHBs.

The following are taken directly from the MoH website:

> The National Health Board (NHB) was a whole-of-system health planning, advice and funding organisation made up of a Board appointed by the Minister of Health and supported by the National Health Board Business Unit within the Ministry of Health... The NHB was disestablished in March 2016…The NHB's functions, including annual and regional funding, monitoring and planning of DHBs, and national service planning and funding have been reabsorbed back into the Ministry of Health (Ministry of Health, 2016a).

Within the Horn report there was a greater emphasis on patient care, stronger clinical and management partnerships, along with improvements in patient safety and quality of care. These were also some of the goal set out for the NHB, yet studies suggest medical errors affect around twelve per cent of patients in New Zealand and could account for up to 30 per cent of healthcare expenditure (Davis et al., 2002). Improvements to patient safety and the quality of care has the potential to not only decrease the rate of errors, to improve the patient journey through the healthcare process, but also to save millions of dollars per year and something the NHB were initially looking into. The CDHB revenue from the Ministry of Health for the operational year ending on the 30th June 2012 was $1,369,837,000 and $1,417,954,000 in 2013 (Audit New Zealand, 2012, 2013). If the figures put forward by Davis et al are correct, there may be potential savings up to and over $410 million a year within the CDHB.

The graphs in figure 4 below shows both the average spending on health per capita and the total expenditure as a percentage of GDP. New Zealand is spending the least per capital out of the 12 counties shown, but has since 1987 / 88 overtaken the UK in total expenditure on health as a percentage of GDP. From 2003 until 2006 the total expenditure on health as a percentage of GDP rose overtaking both Australia and Norway. What does show very clearly is an enormous difference between the per capita spending of public healthcare system, the likes of New Zealand, Australia and the United Kingdom, and the system in place within the USA who spend around $7,300 US to New Zealand spending around $2,300 US for the same period. Yet since 2000 until 2007 the average spending per capita in both the USA and New Zealand has nearly doubled.

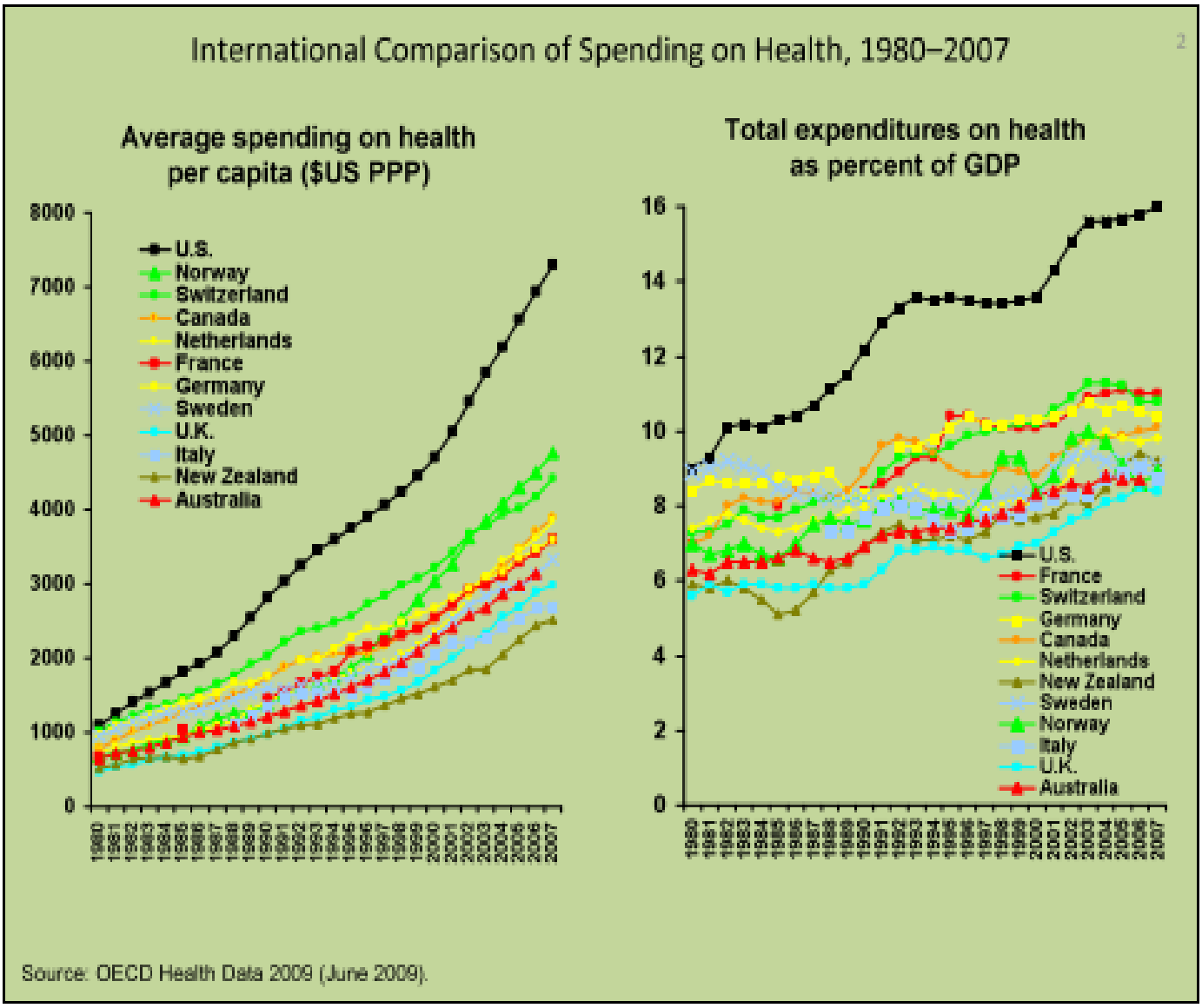

Figure 4 - International Comparison of Spending on Health 1980 - 2007 (Matherson, 2011)

2.7 Chapter Summary

From the initial introduction of the public healthcare system in New Zealand in 1885, the structure of healthcare has gone through many changes. At one point the regionalised healthcare system was made up of 46 boards of control, was reduced to 14 by 1989 and increased to 23 by 1991. This has now settled at 20 after the merger of Southland and Otago DHBs created the Southern DHB in 2010. The New Zealand healthcare system was governed by Boards of control from 1885 up to 1991 when the National Government removed the Boards altogether while at the same centralising the New Zealand healthcare system. During this centralisation period Christchurch hospital went through numerous restructures that resulted in the deaths of three patients in 1996 (Stent, 1998) and saw

clinicians and management in open conflict that was reported in the local newspaper. These conflicts came to a climax in the second half of 1996 when the CEO and Chairman of the CHA resigned to be followed early in 1997 by the resignation of General Manager of the Christchurch hospital.

Centralisation of healthcare in New Zealand lasted until August of 2000 when the Labour-Alliance government re-established regionalisation of healthcare and reintroduced Boards of governance to the New Zealand healthcare system.

Chapter 3

Organisational Structure

3.1 Introduction

The previous chapter presented a historical background of the healthcare system in New Zealand and how this impacted the care of patients at the Christchurch central hospital. This chapter examines the role of DHBs in two segments. The first segment presents various aspects of secondary healthcare structure and function, along with their relationship to management and the impact these have on a healthcare system in general. Eight subsections cover the five core topics of this thesis: Boards vs management, elected versus appointed memberships, centralised versus decentralised structures and the degree of public participation. Three further subsections cover the role of Boards, how the NHS in England looked to reform public engagement and whether competition is healthy in the provisioning of healthcare. The second segment looks at the overall healthcare structure in place within New Zealand.

3.2 Structures within the Secondary Healthcare System

3.2.1 The Role of the Board

The Board of the Canterbury District Health Board has eleven members. Seven are elected and four are appointed by the Minister of Health. Board members are ultimately accountable to the Minister of Health for the performance of their DHB, even though they are the representatives for the local public.

> The Board is responsible to the Minister of Health for the overall performance and management of the DHB. The Board's core responsibility is to set strategic direction and policy that is consistent with Government objectives, improves health outcomes and ensures sustainable service provision. The Board also ensures compliance with legal and accountability requirements and maintains relationships with the Minister of Health, Parliament and the Canterbury community (Canterbury District Health Board, 2014b).

A recent study by Schwartz-Ziv and Weisbach (2013) looked at eleven Israeli Government business companies and found that Boards can be split into one of two distinct types. The first was described as a supervisory or monitoring role, the second as a more active managerial approach. As the

Boards of the New Zealand's healthcare system are a mixture of publicly elected and appointed members and with the MoH questioning the skill sets of the elected members to actively manage and drive performance improvements (Birchfield & Mueller, 2010), this research focused on the supervisory and monitoring aspects of board activity. While the business studied by Schwart-Ziv and Weisbach were not in healthcare, they share with New Zealand's DHBs the fact that the Board members do not have a direct financial incentive tied to the organisations' returns in the manner often employed by corporate organisations. The Israeli Boards that were reviewed were all government appointed, compared to the DHB Boards that consist of a mixture of elected and government appointed members. It is worth noting that in the Israeli companies it was the older and more experienced members who were more active in their management and governance duties. With the CDHB, the older and more experienced members tend to be those appointed by the Ministry of Health rather than the elected members that represent the local population.

Schwartz-Ziv and Weisbach (2013, p. 363) said, "The results suggest that most of the time Boards play a supervisory role." That 97.5% of the time they will agree with the wishes and directions of a Chief Executive Office, and only 1% of the time are they offered more than one option to discuss. Leblanc and Gillies (2010) suggested that in the corporate world of business, while a supervisory role may seem to result in acceptance of all ideas put forward by management, Board meetings should involve a certain amount of disagreement to encourage critical thinking. But by the time a vote is taken, the Board should have reached a consensus. Schwartz-Ziv and Weisbach (2013, p. 362) took this one step further by stating:

> A board in which matters are routinely approved without discussion is thought not to be providing much value to the firm.

A former Chief Executive Officer (CEO) of the Voluntary Hospitals of America, an organisation of over 800 hospitals, summarised the basic role of a healthcare board in the following manner:

> Boards have 3 primary roles: to establish policies, to make significant and strategic decisions, and to oversee the organization's activity (Arnwine, 2002, p. 19).

Schwartz-Ziv and Weisbach (2013, p. 363) state: "Our knowledge of Boards of directors is substantially limited by the private way which they usually operate." This much is also true for the DHBs, as there are portions of Health Board meetings that exclude the general public and meetings extend over lunchtimes, when Board members are able to discuss business without the need for these discussions to be recorded.

3.2.2 Boards or Management

Boards of hospitals were created along philanthropic lines when hospitals were introduced to New Zealand in the late 1800s and the early 1900s. Since then, healthcare management, costs and delivery have changed dramatically. In many counties, there is often a central organization, frequently government run, where national health policies are created, as is the case with the Ministry of Health in New Zealand. As a result of this centralised national model, regional healthcare Boards are now left to monitor the local management team's performance. Alexander and Lee (2006) found that hospitals in the USA governed by Boards created along the lines of a corporate governance model were more efficient than those who were setup in the philanthropic model.

The following table has been put forward by Alexander and Lee (2006, p. 737) and "describes the attributes characterizing and differentiating these models."

Table 5 - Philanthropic and Corporate Models of Hospital Governing Boards

Philanthropic Model	Corporate Model
Large board size	Small board size
Wide range of perspectives and backgrounds	Narrow, more focused perspectives/backgrounds
Small number of inside directors	Large number of inside directors
Little management participation on board	Active management participation on board
No formal management accountability to board	Direct management accountability to board
No limit to consecutive terms for board members	Limit to consecutive terms for board members
No compensation for board service	Compensation provided for board service
Emphasis on asset preservation	Emphasis on strategic activity

Alexander and Lee (2006, p. 737) went on to explain the two models in the following manner:

> The philanthropic model stresses community participation, due process, and stewardship, whereas the corporate model stresses strategy development, risk taking, and competitive positioning.

Findings from the NHS in England noted that "board agendas and management meetings have become dominated by financial issues and activity targets" (Scally & Donaldson, 1998, p. 61). As many of the New Zealand DHB Boards are made up of locally elected people with little or no medical knowledge, poor financial management skills, a lack of experience in healthcare planning and decision making it may be of little surprise that Boards in New Zealand may lack the capacity to

"drive innovation, monitor and question the performance of providers, and act as a sounding board for the chief executive and other full time members" (Laugesen & Gauld, 2012, p. 150). This very issue is also highlighted in Section 3.2.5. where the same questions are raised by the MoH. With the lack of skills to act in a more managerial manner the Board's only option is to act in a philanthropic-style that may be a remnant of what was seen as a local system where locally elected people were able to influence the direction of local services. Frankish and Green (1994) argued that the general public of the USA demand greater responsiveness to the local communities from healthcare professionals and the central policy makers. Yet a reduction in the localisation of healthcare delivery and a move towards semi-centralisation or greater regionalisation is gaining greater support as both a theoretically-sound and pragmatically-based approach to modern healthcare system reforms (Frankish, Kwan, Ratner, Wharf Higgins, & Larsen, 2002). Regional healthcare management teams are commonly regarded as typifying the model best able to lead to better decisions and a more effective, efficient healthcare system, but there is little empirical evidence that citizen participation is needed (Mitton, Smith, Peacock, Evoy, & Abelson, 2009) and as such the requirement for the Board in its present format within New Zealand may have outlived its original purpose.

3.2.3 Elected or Appointed

If the goal of decentralisation was to get community input for the overall management and running of the New Zealand health system by having a community led Board, then the overall statistics for voter turnout do not seem to support the community involvement model. Figures since the introduction of decentralisation document a drop in the numbers of voters participating in the local body election process[3], from an average of 47% in 2001 to 42% in 2013 ("Local Authority Election Statistics, " 2013). New Zealanders' participation in local body elections compares well to the United Kingdom who operate a similar national healthcare system, where the average turn out dropped from 36% in 2008 to just over 31% in 2012 (Rogers & Burn-Murdoch, 2012). These figures pale in comparison to those in Sweden where over 80% of the population voted in local body elections in 2002 (Inter-Parliamentary Union, 2002). When looking at local elections around the world, it becomes apparent that many counties struggle to get involvement from the public during local body election process (Milner & Ladner, 2006). Figure 5 is taken from the Local Authority Election Statistics covering the period from 1989 to 2013 and clearly shows the trend for local election voter

[3] Elections of local authority members, including DHBs are held once every three years. The next elections will be held in 2016 for city and district councils, regional councils and DHBs. In some parts of New Zealand elections will also be held for local and community boards, licensing trusts and some other organisations. All elections are currently held by postal voting ("Local Elections," 2016).

turnout has declined over the 24-year period. By 2013 the turn out for CDHB elections had dropped to a recoded low of 42% and of the votes that were cast, over 20% of the returned voting papers were rejected as invalid (Carville, 2013).

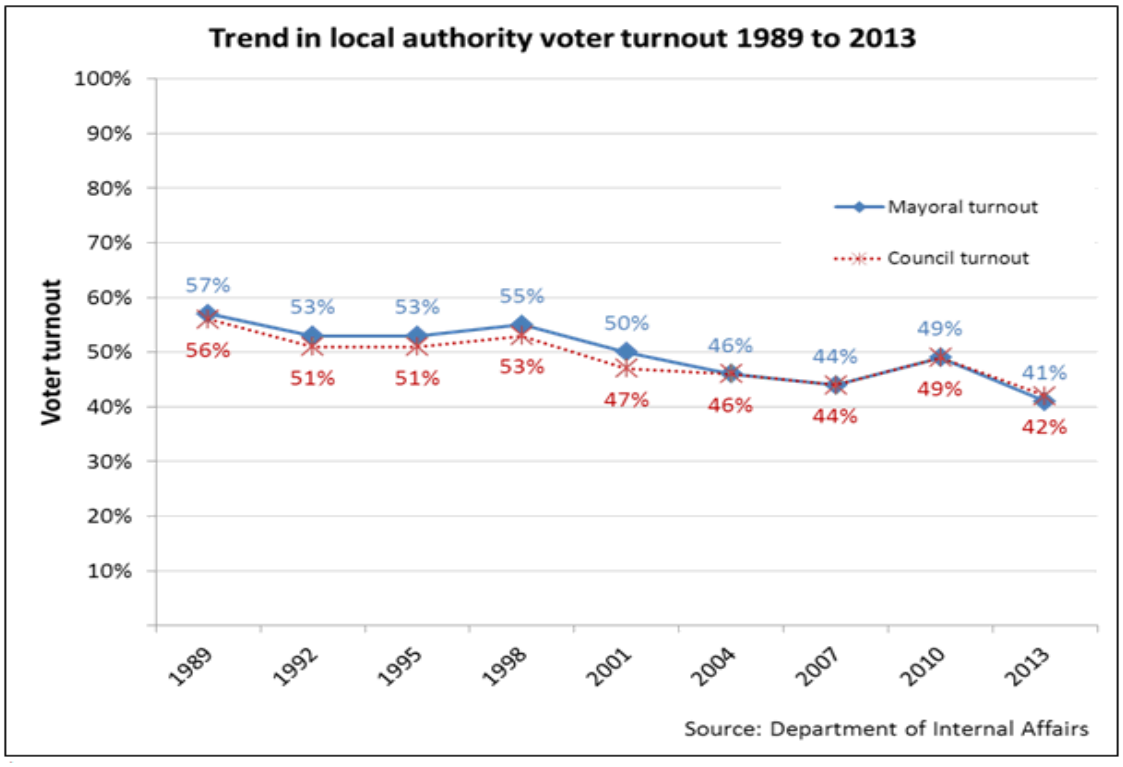

Figure 5 - Trend for Local Authority Voter Turnout 1989 to 2013 ("Local Authority Election Statistics," 2013)

With fewer people voting for their health Board members, questions are being asked by governments if elected Board members fully represent the local population (Baggott, 2005; Birchfield & Mueller, 2010). As the election process is often seen as cumbersome, and as the returns for Board members are often seen as modest compared to industry, many capable people are disinclined to present as candidates (Lewis et al., 2001). One of the many arguments put forward to keep elected membership is to gain the acceptance of the local residents. But with greater centralisation of the healthcare system, it is becoming harder to identify how local representation can be achieved. To support the idea of replacing elected board members, a study in Canada found that a higher proportion of appointed members perceived they had greater community respect and support compared to elected members (Lewis et al., 2001). With a continual decline in voter turnout for local body elections coupled with the lack of required skills sets within those members standing in the election process, a move to a fully appointed board may be held in greater esteem by the people they are set to represent here in New Zealand.

The elected members of a DHB Board are representative of the public and as such they are expected to attend all Board meetings and champion public health-related initiatives. If the board members are not achieving those goals, are not attending board meetings, then it may be fair for the public to ask just what their representatives are doing on their behalf. Holding the position of an elected member of the board for the local DHB brings with it a financial reward. This money may be viewed as compensation for the time and effort to attend meetings, to read and understand many of the reports presented at those meetings as well as being available to the electorate should they be approached. The following editorial from *The Press on 19th November 2012*, highlights that this may not be the case, and lists just who from the Board makeup in 2012 attended the 11 board meetings per year and who do not.

> Aaron Keown … who received the most votes during the 2010 election has attended only one full meeting this year … Aaron Keown is not the only CDHB member to miss meetings since the 2010 election. Appointed member Susan Wallace has been absent seven times. Elected member Anna Crighton has been absent six times. Four meetings have been missed by appointed member Elizabeth Cunningham, appointed chairman Bruce Matheson, and elected members Chris Mene, Olive Webb and Wendy Gilchrist. Elected member David Morrell has been absent three times. Appointed deputy chairman Peter Ballantyne has been absent twice. Elected member Andrew Dickerson is the only Board member to have attended every meeting since the 2010 elections (Mathewson, 2012).

3.2.4 Centralised or Decentralised

The reallocation of authority away from the centralised state has stimulated many discussions on the issue of centralisation/decentralisation. Though many agree that governance should be multi-layered, there is no general consensus on how this can be achieved (Liesbet & Gary, 2003). The centralised system produces a one size fits all model, and within healthcare this is often seen as no longer reflecting local needs (Sah & Stiglitz, 1991). With centralisation comes a greater ability to create wider ranging positive benefits via the decisions of highly capable managers, but highly incapable managers are able to create greater deleterious effects (Sah & Stiglitz, 1991).

The ongoing question of greater centralised decision making versus a greater delegation to decentralised units has been discussed in many management literature papers (Byrkjeflot & Neby, 2008; Kuhlmann & Saks, 2008; Mitchell & Bossert, 2010; Zabojnik, 2002). The main focus of these discussions has often revolved around two points:

1. Decentralisation can lead to a better understanding of information as it becomes distributed throughout all levels of an organisation (Byrkjeflot & Neby, 2008).

2. The perceived loss of control by a central agent (Zabojnik, 2002).

In many countries, decentralisation now seems to be the preferred management strategy for healthcare organisations (Magnussen, Hagen, & Kaarboe, 2007). This means devolution away from the central government healthcare department to regional, area, or DHBs (NZ) and Local Health Trusts (UK) (Bardhan, 2002; Rico & Léon, 2005). Yet decentralisation seems to be an unfinished and ongoing process where there is still a fine balance between central governance and greater self-rule (Rico & Léon, 2005).

In many of the countries running a national Healthcare system, the UK, Canada, Australia and New Zealand, decentralisation of financial and political power is viewed as a method to improve the outcomes of regional and local healthcare issues. A study has been run in various OECD countries with the results showing that many different financial and political models are being used. With this information there is no solid conclusion on which system is clearly better than any other (Rico & Léon, 2005).

Since the Second World War, decentralisation has been one of the main thrusts of healthcare policy world-wide, though New Zealand went through a period between 1991 and 2000 of greater centralisation. With the new century, this policy of decentralisation seems to have taken a subtle turn (Laugesen & Gauld, 2012). Because of the increasing costs of modern medicine and the complexity of treatment, locally administered healthcare plans are becoming inefficient and result in unacceptable and costly duplication (Saltman, 2008). The advances in technical medicinal treatments and the introduction of the electronic health record have made it more feasible to monitor and in some cases plan for the delivery of healthcare at a central level (Saltman, 2008).

However, there is still a need for the specialized district sites to share the localised medical knowledge (proximal knowledge) (Trinder & Reynolds, 2000). For this local knowledge to be relevant to a larger district or national environment, proximal knowledge must be de-contextualised, the core elements identified, transferred to another care environment, and re-contextualised in the new care setting (Clarke & Procter, 1999). Importantly for a district healthcare system, proximal knowledge is more likely to be sensitive to the demands of the individual, yet it is this very sensitivity that is key to individual patient care that could be lost with the growth of a centralised healthcare model. Clinicians may put a greater emphasis on tacit knowledge when organising healthcare for a region (Meijboom, de Haan, & Verheyen, 2004), sharing this knowledge within the hospital, and at the

same time being expected to stay on top of approximately 10,000 different diseases and syndromes, 3000 medications, 2000 laboratory tests, and many of the 400,000 plus articles added each year to the biomedical literature (Nicolini, Powell, Conville, & Martinez-Solano, 2008), clinicians can easily be overwhelmed.

With all this in mind, I return to the earlier question; centralisation or decentralisation for healthcare governance? This research has found that there is no solid conclusion on which system is clearly better than the other (Byrkjeflot & Neby, 2008; Ciani, Tarricone, & Torbica, 2012; Rico & Léon, 2005)

3.2.5 Public Participation

Does public participation improve and enhance the legitimacy and quality of decisions made by governments, health Boards and public bodies? According to Barnes et al. (2003, p. 379)

> Enhanced public participation is viewed as capable of improving the quality and legitimacy of decisions in government, health services, local government and other public bodies, as well as having the potential to address the 'democratic deficit' and building community capacity and social capital.

The involvent of the public may be viewed as a way of manipulation rather than empowerment, when governments fail to recognise the different public perspectives, abilities, and motivational factors. Likewise, if little thought has been applied to the overall function of the citizen groups, then the selection criterion often fails to take into account relevant skills, competences, and the ability to truly represent the relevent constituencies. These may actually result in the exculsion of certain groups of the community (Barnes et al., 2003).

Following on from the idea of public participation within the local healthcare system, there has been growth in public forums, community action groups and citizen juries (Barnes et al., 2003; Lowndes, Pratchett, & Stoker, 2001). Deliberative forums are intended to be inclusive, often having a goal of drawing excluded or marginalised groups into the policy or decision-making process (Barnes et al., 2003; Social Exclusion Unit, 1998). This idea of drawing in all sectors of the community is questioned in the following statement:

> Does representation of disadvantaged groups require their actual presence within the forums and assemblies in which policy decisions are being made? (Barnes et al., 2003, p. 383).

Instead of actively including marginalised groups, public forums may actively seek to exclude the very public they represent by classifiying them as “special interests” (Pfeffer, 1995) and that excluding them is often done for their own benefit (Littlewood, 2001; Prior, 1999). These very people, those from residential care, the physically frail, or those with mental health problems, are precisely the groups of people that should be included in community forums.

From all the skills people could possess when taking up a position within public forums, there is a belief that “technical knowledge and skills were valued more highly than experiential knowledge” (Barnes et al., 2003, p. 393). From a New Zealand perspective, the MoH has noted concerns about the capacity of DHB Boards to govern effectively, particularly questioning whether the elected members of DHB Boards actually have the necessary skills to drive performance improvements, especially in the areas of financial performance (Birchfield & Mueller, 2010).

> While much literature has debated public engagement in healthcare decision-making, there is to-date no consensus on when public engagement should be sought (Mitton et al., 2009, p. 219),
>
> [W]hether the type of engagement is actually encouraging the people with the required skills sets (Laugesen & Gauld, 2012, p. 150).

Finally, as put forward by El Ansari and Andersson (2011) there is to date no definitive study of public participation in a health system showing either the costs or benefits of local input.

3.2.6 Reforming Public Involvement in the English National Health System

Baggott (2005) looked at the ways the English National Health System (NHS) had endevoured to gain greater involvement of the general public with healthcare policy, healthcare planning, service provisioning and the benefits this had for the NHS. The study highlighted findings by the World Health Organisation (WHO) and the Council of Europe, as well as research performed in Canada, Holland and Australia promoting greater involvement of the local population (Council of Europe, 2000; Lister, 2001; World Health Organisation, 1994). The NHS has had various degrees of public involvment in health service since it was introduced in 1948. Initially, as directed by the Minister of Health, "lay members" were appointed to positions of authority in both regional and local healthcare sites. However, because these positions were appointed and not elected by the communities they claimed to serve they were viewed as lacking any legitimacy when acting as public representatives (Baggott, 2005, p. 535). This was changed in the 1970s when the lay members’ positions were no longer centrally appointed, becoming elected by the local authorities. But this democraticisation of

the NHS governing bodies only lasted until the 1990s when the incoming Conservative Government ended the practice. The new patient forums were in the end described as ”a gothic divide and rule architecture of public and patient involvement” (Hansard, 2003, as cited in Baggott, 2005, p. 547) that resulted in a lack of unification between the British public and the public healthcare providers. While cultural changes within healthcare may promote greater empowerment of citizen bodies or forums, greater accountability and a greater degree of transparency of the healthcare service may result in far greater benefits (Gillam & Brooks, 2001; Jewkes & Murcott, 1998; Rowe & Shepherd, 2002).

3.2.7 Complexities in Healthcare Management

Since the early 1980s there have been numerous studies regarding both the differences and similarities between healthcare organisations in the public and private sector (Anderson, 2012; Fottler, 1981; Lachman, 1985; Perry & Babitsky, 1986; Perry & Rainey, 1988; Rainey, 1979; Solomon, 1986; Whorton & Worthley, 1981). Whorton and Worthley (1981, p. 357) went on to write:

> Management in the public sector presents a number of unique challenges stemming from the paradoxical nature of the public administration environment…the public manager may indeed face a more complicated challenge than its counterparts within the private sector… inadequate understanding of the culture of public administration is a key obstacle to managerial improvement in government.

Healthcare management is recognised as a specialist area of learning and as such many universities offer studies, ranging from diplomas, to Master's degrees in healthcare management, ethics, communications and leadership (Cornell Institute of Business & Technology, 2015; Harvard School of Public Health, 2014). Rather than a planned process, management and provisioning of the healthcare sector may be viewed as a continual negotiation between a number of parties: Government, voluntary and community organisations, and the private sector. With this model, the key task of government becomes the management of these complex networks of public service provisions (Cerny, 1997; Kickert, Klijn, & Koppenjan, 1997; McLaughlin, Osborne, & Ewan Ferlie, 2002). This view of healthcare management may have come about because the image today is one where the system should provide for the individual needs of the members of the public while at the same time the public are increasingly demanding a greater say in the design and delivery of what they see as their service and in addition, they expect far greater choice (McLaughlin et al., 2002).

In comparison, it was the private sector organisational model that was used by New Zealand's National Government in 1993 when setting up governance for PHARMAC, an organization that has been credited by the British Medical Journal (BMJ) as ”the key reason for New Zealand’s low pharmaceutical prices” (Cumming, Mays, & Daubé, 2010, p. 2441).

PHARMAC was setup in 1993 as a response to the spiralling cost of medicines within the New Zealand healthcare system.

> During the 1980s medicines prices were increasing at a faster rate than other healthcare spending, and were one of the fastest growing items of Government expenditure. Growth of more than 20% in some years meant medicine prices were threatening to crowd out other healthcare funding (PHARMAC, 2012).

The objective of PHARMAC was to introduce “price competition” amongst the pharmaceutical industry to gain better value for medicine spending within the New Zealand healthcare system. PHARMAC introduced the model referred to as “reference pricing” where drugs offering the same benefits were subsidized in place of the higher priced internationally branded medicines. But this is not the only area of PHARMAC’S responsibilities. They also have a strong interest in the use of the medicines within the healthcare system, with specific emphasis on the underuse, overuse and misuse of medicines. The first campaign run by PHARMAC was in 1998 and was aimed at the inappropriate prescribing of antibiotics for winter colds and flu (PHARMAC, 2012).

3.2.8 Is Competition Healthy Within Healthcare Provisioning?

The term “neoliberalism” within healthcare is made up of two notions, neo, meaning new and liberal meaning free from government intervention, or rather a belief in the efficiency of the free market. This system of healthcare is often viewed as the model in place within the USA. This is in contrast to the “socialised” healthcare model in place in New Zealand, the UK, Scandinavia and Canada where the state, or central government, regulates healthcare subsidized from taxation.

Unlike agriculture or the manufacturing industry, public healthcare organisations are not usually driven by the need to operate at a profit (Christensen, Lægreid, Roness, & Røvik, 2007; Haynes, 1980). Standard market theory, when applied to a National Healthcare System that is overseen and regulated by a central governing body, may produce ambiguous predictions when looking at the effects of competition (Mays, 2011). This is complicated by the fact that patients are dependent on the decisions of doctors about what is needed, and management direction that may be driven by a

central governmental organisation, the MoH, setting out directives and policy that dictates whether they are able to access further care. If the failings of private contracting in the US are underappreciated, so too is a major success story of the Veterans Health Administration (VA) system.

> This network of hospitals and clinics owned and operated by the US Government was long derided as a US example of failed Soviet-style central planning. It has recently emerged as a widely recognised leader in quality improvement and information technology. At present, the VA offers more equitable care, of higher quality, at comparable or lower cost than private sector alternatives (Woolhandler & Himmelstein, 2007, p. 1127).

Yet the shift from a public service to a business model has, on average, raised costs partly by stimulating the growth of bureaucracy.

> The proportion of health funds devoted to administration in the US has risen 50% in the past 30 years and stands at 31% of total health spending, nearly twice the proportion in Canada… Meanwhile, administration has been transmogrified from the servant of medicine to its master, from a handful of support staff dedicated to facilitating patient care to a vast army preoccupied with profitability (Woolhandler & Himmelstein, 2007, p. 1127).

This transformation has had an impact in other nations as well. The advent of internal markets sharply increased administrative costs in the UK (Health Policy Network of the NHS Consultants' Association, 1995) and within New Zealand during the centralisation period of 1991 to 2000 (Coney, 1996). Within Canada, a country that runs a national Healthcare system providing publicly funded healthcare to all Canadian citizens, the overheads of Canadian private insurers in 1999 were ten times higher than those of public provincial health insurance programmes. Comparing the administration cost of the Canadian public system to the USA, the USA spent about $450 per capita on health care administration, compared to Canada who spent about $150 per capita (Woolhandler, Campbell, & Himmelstein, 2003). In Australia during the period 1998 to 1999, tax subsidies for private insurance directed money through private firms, with overheads averaging 12% versus 3.5% in the public programme (Wilcox, 2001). Duckett and Jackson (2000) stated that private hospitals in Australia are about 10% costlier than public ones. As Germany's insurance plans adopted an increasingly business-like mode of operation, administrative costs soared 63.3% between 1992 and 2003; meanwhile doctors complained about an avalanche of paperwork (Hyde, 2006).

Health systems in every nation need continuous innovation and improvement to keep ahead of the ever-increasing cost of the delivery of healthcare and medications. However, “remedies imported

from commerce consistently yield inferior care at inflated prices" (S. Woolhandler & D. Himmelstein, 2007, p. 1139). S. Woolhandler and D. Himmelstein (2007, p. 1129) went one step further by stating that "poor performance of US health care is directly attributable to reliance on market mechanisms."

3.3 Healthcare Structure in New Zealand

Public healthcare organisations are fundamentally different from their counterparts in the private sector (Regidor et al., 2008). Within New Zealand the system is multifunctional while also being accountable to both political and publicly elected leadership. The DHB system requires an emphasis on openness, transparency, impartiality and predictability while patients within the system expect equal treatment regardless of race, age or gender.

> Healthcare and disability services in New Zealand are delivered by a complex network of organisations and people. Each has their role in working with others across the system to achieve better health for New Zealanders (Ministry of Health, 2014a).

At the heart of the New Zealand healthcare system are the 20 District Health Boards, responsible for delivering all aspect of healthcare for their region. Though each DHB is an entity in its own right, accountable to the people of its region via a governing Board of directors, the first line of reporting and accountability is directly to the Ministry of Health and central government. The DHBs are also responsible for the planning and funding of the various primary healthcare services, including GPs, midwives, disability services and community and voluntary providers, though some community and primary services receive direct funding from the MoH. Regardless of how funding is provided, the majority of the reporting and monitoring for primary services is managed via the regional DHB.

> The Ministry of Health allocates more than three-quarters of the public funds it manages through Vote Health to DHBs, who use this funding to plan, purchase and provide health services, including public hospitals and the majority of public health services, within their areas (Ministry of Health, 2015).

Figure 6 gives a graphical representation of the funding split by the MoH with regards to nationally sponsored services, the DHBs and the Ministry.

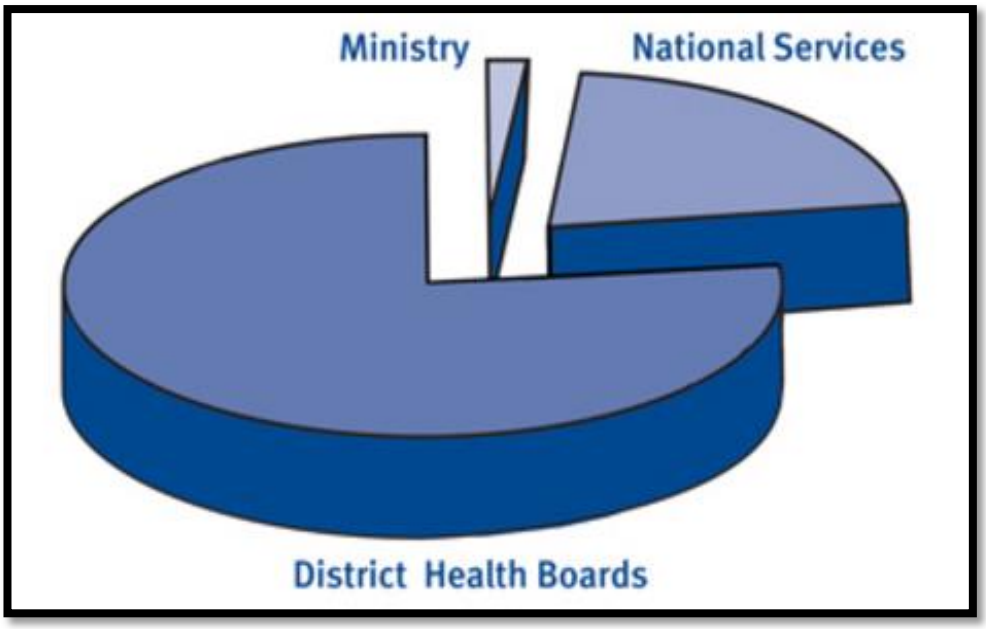

Figure 6 - Vote Health Funding Allocation (Ministry of Health, 2015)

Within Figure 6, around 19% of the Vote Health funding is used to support national services, just over 1% is spent running the Ministry, with the remaining 80% of Vote Health funding going to the DHBs.

Many important roles within the New Zealand healthcare system are performed outside the DHB structure. This external network is made up of public health units, Crown entities, non-governmental organisations, and the primary health sector, who all provide vital services that both support and contribute to a level of efficiency and quality within the healthcare structure. Added to this are the professional and regulatory bodies for all levels of healthcare workers covering the allied health groups, nursing, medical and surgical specialisations. A range of research institutions and educational trusts offer support to many of the employees within the healthcare system. There are also advocacy groups and consumer bodies providing vital support and services for specific areas of healthcare both at the patient and provider levels. At the centre of this whole structure is the MoH with a range of roles including principal advisor to the Minister of Health. To ensure this entire network of organisations is funded and fully accountable, a web of accountability arrangements has been setup to ensure optimal performance is achieved across the entire health and disability system. Figure 7 provides a detailed pictorial layout of the New Zealand healthcare system.

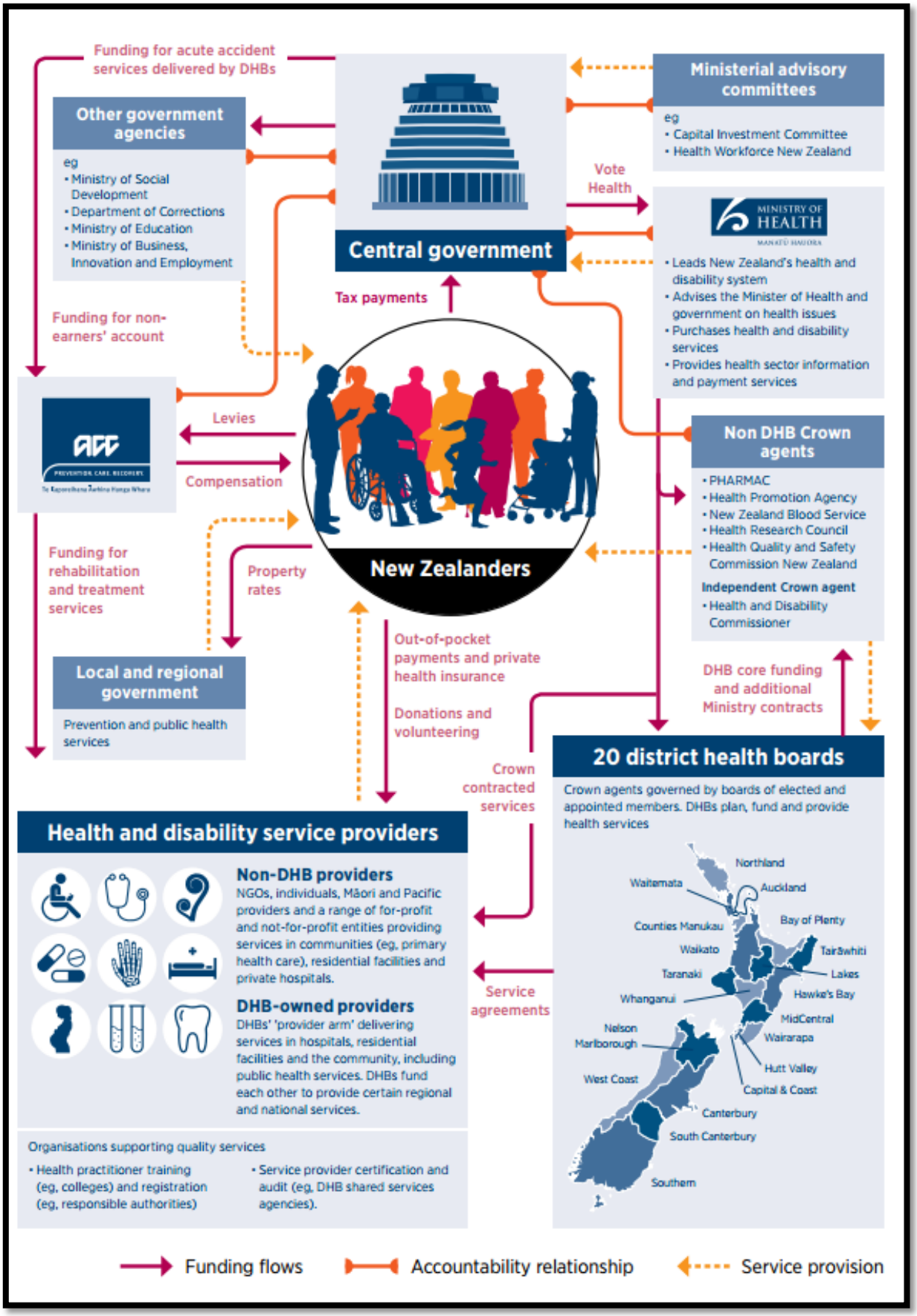

Figure 7 - Overview of the New Zealand health and disability system (Ministry of Health, 2016b)

Major restructuring of the governance and management of healthcare during the 1990s had little impact on overall costs or efficiency (Bloom & Guest, 2001). Within any healthcare system, regional or central, a general increase in healthcare spending on a national level is not uniformly associated with improved health amongst all regions (Clancy & Cronin, 2005).

Many of the policy changes for healthcare over recent years have come about because of the financial pressures placed on hospitals and DHBs as successive governments strive to restrict the healthcare budget. This has been highlighted recently with the reported cuts to the mental health budget within the CDHB even though the call on mental healthcare workers has increased in the Canterbury district since the earthquakes in 2010-2011 (Stewart, 2016).

As the DHBs first line of reporting is now directly to the central government and not to the local public, the need for a locally elected Board may be irrelevant, and its removal may save the health system both time and money. If there is justified need for some form of public control over the healthcare system, should this be elected by the local population, or appointed by central government? Conversely, is there a need for a district governance system if the reporting model dictates the first level of accountability to central government? Central reporting may be better served with a central governance system.

3.3.1 District Healthcare Structure

The current DHB structure presents a system with large amounts of duplication that could be reduced or removed with the introduction of greater centralisation.

> DHBs have not worked collaboratively to develop and plan services, and localised control has worked against the development of a health care 'system', and instead facilitated the creation of multiple parallel local systems with their own executive management teams, budgets and planning processes, and configurations for service delivery (Laugesen & Gauld, 2012, p. 170)

With the increasing cost of specialised medical departments and shortage of qualified staff, many of the smaller DHBs are having to rely on larger DHBs to provide the costlier treatments. The Burns and Spinal Injury Units situated at the Burwood hospital in Christchurch are two examples of locally provided national treatment centres. These units are the primary centres of specialised care not only for the South Island, in the case of the Burns Unit, for the entire country. This move to provide centres of excellence for medicine is resulting in greater centralised healthcare, yet this is not

reflected in the administrative or management structures. Looking at Figure 8, the management system within the DHB reflects a regionalised structure, and may actually be diametrically opposed to the greater use of centralised medical departments.

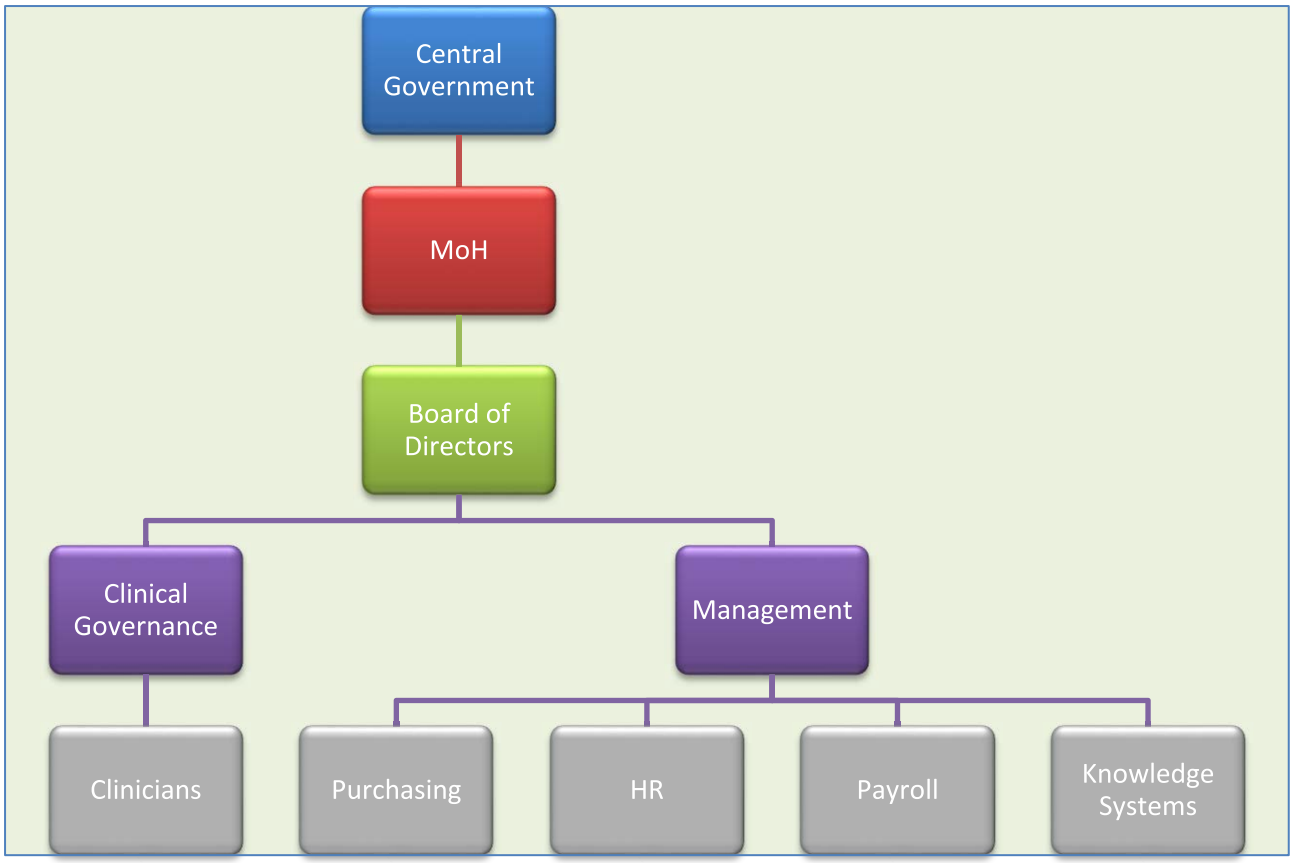

Figure 8 - Simplified District Health Board Structure

A regional management and governance structure has the potential to become more inward looking with regards to regional demands as each DHB reacts to the request of the local population and the locally elected Board members, rather than having a greater holistic view of healthcare across all of New Zealand. Funding arrangements would also need to differ from those in place for a specific regional system as the number of patient being transferred into the specialised unit from the other DHBs begins to surpass those of the region the unit is situated within. Adding to the growth of specialised district centres is the availability of modern transportation. With the increase in roading and the expansion of public transport systems, regions are no longer as isolated as they once were. People are often better placed to travel further and as such the smaller district hospitals and

healthcare providers no longer need to offer some of the specialist services provided by the larger district healthcare centres. This model, where smaller local hospitals refer patients onwards to the larger regional specialist services, supports the growth of a centralised specialized healthcare system. As more clinicians work in a centralised national healthcare model, a localised district structure may stymie their ability to provide the best care for patients from outside regional borders.

3.3.2 Clinical Structure Within the New Zealand DHBs

Clinicians working in the Christchurch Hospital have a number of accountability streams. Within the hospital setting they are accountable upwards to those in positions of medical seniority, culminating with the Chief Medical Officer. This accountability structure can be seen in Figure 9.

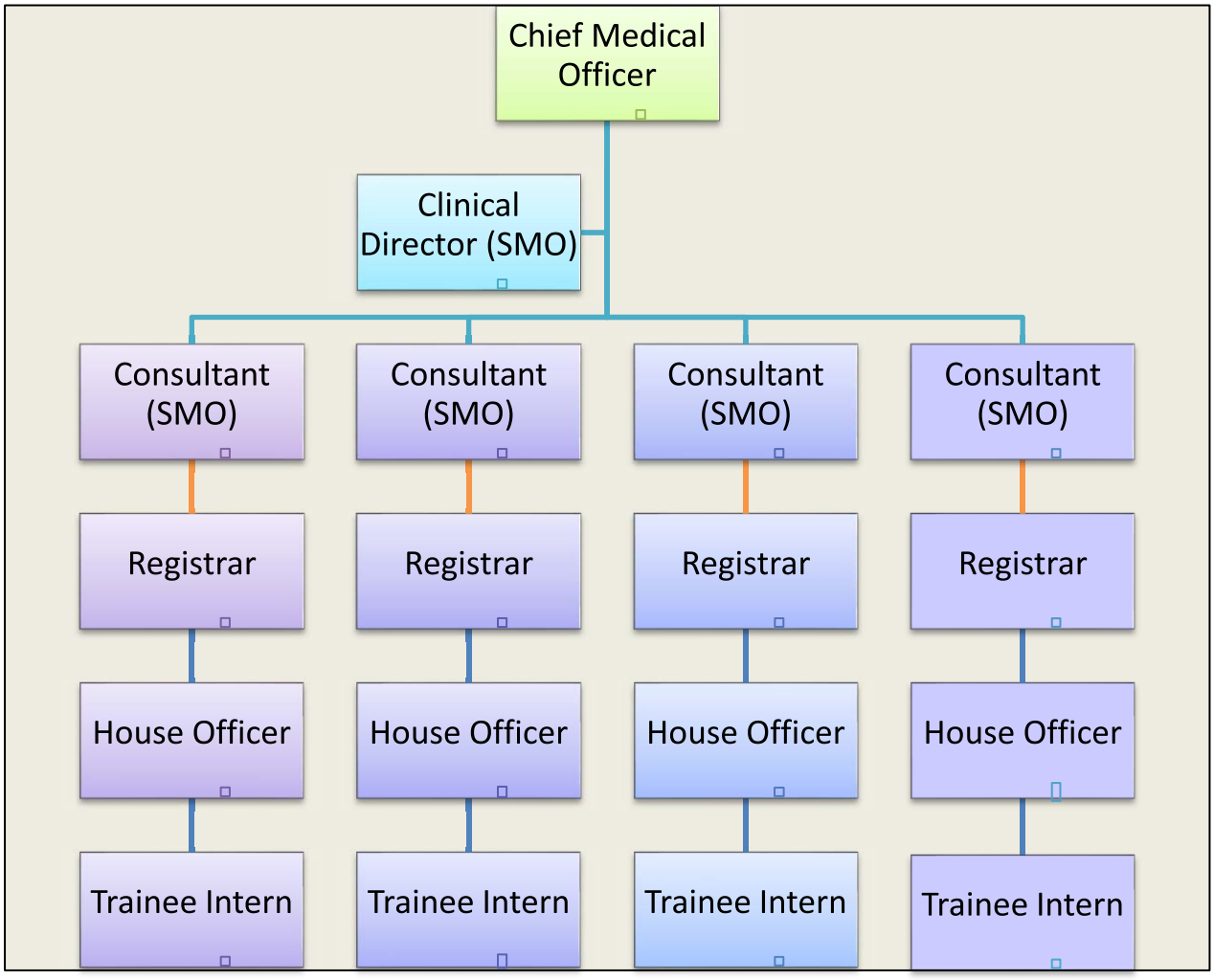

Figure 9 - Clinician's clinical accountability structure within the CDHB

Under the divisional structure utilized within the New Zealand healthcare model, Clinical Directors occupy an ambiguous position in the management hierarchy. Clinical Directors are usually SMOs operating in both a clinical and managerial role. Yet their managerial role seems to lack a clear and acknowledged line of responsibility to senior hospital management.

For many departments within the DHB, at the bottom of the ladder is the trainee intern who works alongside qualified clinicians and gains the experience required to complete their medical study. Newly qualified doctors within a department are usually listed as House Officers and will have to pass through many years of further study and exams to reach the position of Registrar, then again, more study and more exams before they specialise and gain recognition as a Senior Medical Officer (SMO). Within highly specialised departments, some of the SMOs may report to the MoH, as well as upwards through the existing hospital structure. The same SMOs may also report directly to the Chief Executive Officer of the DHB. With the specialty department, there may be a SMO assigned to the position of Clinical Director. This position varies from speciality to speciality, and because of the extra and varied workload this position is often only held for a number of years. Not only is the Clinical Director a senior clinician, Thorne (1997, p. 205) went further by saying:

> Clinical directors embody the tensions and conflicts of different managerial and professional cultures, whilst attempting to reconcile the demands of purchasers with the views of disparate and difficult professional colleagues.

It is not surprising that for any SMOs, being a Clinical Director is often viewed as a potential threat to their professional identity, autonomy, and collegiality for both the individual and the clinical speciality the director is representing (Thorne, 1997). Ferlie, Ashburner, Fitzgerald, and Pettigrew (1996) suggested that clinicians may view this move towards management as a betrayal of their clinical profession. Fitzgerald and Dufour (1997) proposed that clinicians who took on this dual mantle were often viewed with a degree of suspicion by their colleagues and the position of Clinical Director has been described as “a sop to the clinicians, so they could feel that clinicians still had some say in the running of the place” (Doolin, 2001, p. 236). This may have been an attempt by senior hospital management to win clinicians over to managerial values and thinking. The idea of transferring the responsibility from management to clinicians was to engage the same people who delivered patient care in strategic management decisions for the day to day running of the clinical department (Thorne, 2000).

The following quotes were taken from a letter to the editor of the Irish Journal of Medical Science, submitted in 2009 by Latif (2011, p. 299) and highlight reasons why clinicians are not always coming forward to take up the mantle of Clinician and Manager:

> Most doctors are reluctant to participate in management due to lack of time, poor involvement in management by the managers, lack of understanding of management culture, and lack of opportunities to get training in management in spite of a strong inner desire to be involved which leaves them frustrated at times… Power without responsibility is dangerous, but responsibility without power is frustrating …[D]octors are not sure what role is expected from them, whether it should be, 'doctors as managers', 'doctors in management', or 'doctors and management'.

The following was quoted by Doolin (2001, p. 241) from a senior clinician regarding their management team:

> I object to someone who has trivial training and very little understanding of my field running my life. For example, MBAs, it's an Outward-Bound course at university as far as I can see, for people who haven't even had a previous degree.

With these types of comments healthcare managers may be viewed as poorly qualified and management as nothing more than just common sense. As such, the role may be perceived as being one that is easily learnt and seen as below the level of a fully trained clinician (Ferlie et al., 1996).

Smith (1955, p. 59) summed up one of the issues that may have prompted management to introduce the position of Clinical Director:

> There is almost no administrative routine established in hospitals which cannot be (and frequently is) abrogated or countermanded by a physician claiming medical emergency – or by any one acting for the physician and similarly claiming medical necessity.

Smith also went on to point out the dual levels of authority that abounds with a hospital come close to those described by Max Weber, the German sociologist, philosopher and political economist. By creating the position of Clinical Director, it may help to reduce the dichotomy of values where management are focused on the budgetary values of a hospital, and clinicians are more attuned to the healthcare needs of the public, including those who cannot or will not contribute to their own care (Smith, 1955).

3.4 Chapter Summary

New Zealand has had public Boards involved in the governance and management of the healthcare system for the majority of the time that a healthcare system has existed. Because of the reporting structures, public Boards are accountable to the government, and not to the local residents of the

DHB region. In this manner, the public Board may be seen as a "rubber stamping" agent acting on behalf of a central management agency and only giving the impression that a regional, non-centralised system exists. If accurate, Boards may have become nothing more than local representatives administering central government policy (Laugesen & Gauld, 2012, p. 141), and there may be a case to remove elected members from the Board altogether and move towards a fully elected Board. But by doing so it would remove the main area that is seen as involving the public within the public healthcare system. Looking back at the figures for public engagement within the DHB and local body elections, with the number of people actually voting for these local bodies falling, public engagement in its present format may not be receiving support from the public the healthcare system is trying to engage with. Although the overall number of Boards has been reduced from 46 to 20, when compared to models in use overseas, the resident population for some of New Zealand's smaller health Boards are seen as too small to have enough residents with the required skill sets to stand as Board members (Laugesen & Gauld, 2012, p. 11). As put forward by El Ansari and Andersson (2011) the lack of a definitive study of the benefits of local participation within healthcare again raises the question of whether elected or a fully appointed Board may benefit the DHB system.

The complexity of the modern-day healthcare system may have introduced multiple lines of authority for senior clinical and medical members. Through these multiple lines or reporting the clinician has in the past and still may abrogated or countermanded many of the administrative routines in the name of clinical emergency or patient safety. Finally, the following poem, "I used to be a doctor" (Cooke & Philpin, 2008, p. 101), may sum up some of the frustrations felt by those practicing medicine.

> I used to be a doctor
> now I am a Health Care Provider
> I used to practise medicine
> now I function under a managed care system
> I used to have patients
> now I have a consumer list
> I used to diagnose
> now I am approved for one consultation
> I used to treat
> now I wait for authorisation to provide care ....
> I used to have a successful people practice
> now I have a paper failure
> I used to spend time listening to my patients
> now I spend time justifying myself to the authorities
> I used to have feelings
> now I have an attitude
> Now I don't know what I am

Chapter 4

Methods

4.1 Introduction

This chapter discusses the methodological steps of defining the issue, determining the sample size, collecting the data, and analysing the data. An increasing number of researchers are using a mixed method approach for their research, a combination of quantitative and qualitative questioning. This approach is seen as offering both a logical and intuitive link between the two types of data, quantitative and qualitative (Bergman, 2008; Brannen, 2008; Onwuegbuzie & Leech, 2006), thus providing a richer and more informative mechanism for understanding.

This research uses the mixed method approach, where both qualitative and quantitative questioning were incorporated into a structured interview. This was designed to gain a more holistic and comprehensive understanding of the impact the Canterbury District Health Board structure has on the efficiency and efficacy of clinical operations from a clinician's perspective within the Christchurch hospital. The use of this method allowed the collection of quantitative data which provided direct measures of physicians' opinions whilst also allowing them to express their individual views of the issues and challenges this project focussed upon.

To enhance understanding of the comments in the literature review, it is necessary to understand what the board actually does. With this in mind an analysis of the board meetings was conducted. This had the added benefit of informing the survey creation and interpretation.

4.2 CDHB Board Meeting Analysis

One way of analysing what the CDHB Board do is to look back at Board meeting agendas and minutes to review what sort of issues or points were being brought before the board. If the Board are openly discussing the points put to them, whether the Board was able to provide any input, suggest any direction for issues or offer advice and guidance, or whether they were only being brought to the Board's attention but needed no action. At the same time as looking at the direction and input of the Board to the point put forward, the research was able to review input from the clinical areas to the Board.

Data from 32 CDHB Board meetings were analysed and coded following standard content analysis methods (Krippendorff, 2012; Lieblich et al., 1998; Schwartz-Ziv & Weisbach, 2013). Of the 32 board meeting documents, 12 were taken from September 2009 to September 2010, representing a pre-earthquake period. No meetings were held in January due to the Christmas and New Year holidays. The remaining 20 documents were from February 2012 to October 2013, representing a post-earthquake period. The time period of 32 months was selected because this was the only Board Meeting data available. Information prior to September 2009 was no longer in the public domain.

For each of the items listed within both the agenda and meeting minutes, the following areas were searched for and recorded:

1. Number of Points Discussed: Within the meeting minutes how many of the areas or points set down generated general discussion between members of the Board and management.

2. Options Offered: Were the Board presented with a range of options to discuss, and allowed to vote on which direction, or action, would best suit the CDHB?

3. Motion Passed: After any ensuing discussion, was there a final motion to accept or reject the point(s)?

4. RFI: (Request for Information) had there been any request for more information?

4.3 Qualitative versus Quantitative Research

Qualitative research endeavours to make sense of, or interpret, situational data in terms of the meanings people bring to them (Denzin & Lincoln, 2011; Silverman, 2013). The use of qualitative data lends a certain amount of strength and richness to the research method, concentrating on the processes, while extrapolating meaning and understanding (Creswell, 2013; Patton, 2002). Many of the phenomena this project was designed to investigate required an understanding of how the respondents interpreted the managerial demands of their jobs. For this project, then, a qualitative approach enabled the interviewee to offer up vivid accounts of their experiences gained through working in their specific field of specialisation. This recognised that much of the data necessary for the study could not simply be reduced to numbers (Fitz-Gibbon, 2000), preserving the richness qualitative data can provide. Merriam (1988, p. 17) went on to explain that the act of quantifying textual qualitative data may lead to a loss of understanding when it comes to specific individual's situations:

> Qualitative research assumes that there are multiple realities – that the world is not an objective thing out there but a function of personal interaction and perception. It is a highly subjective phenomenon in need of interpreting rather than measuring. Beliefs rather than facts form the basis of perception. Research is exploratory, inductive, and emphasises processes rather than ends.

In comparison to qualitative data, quantitative data can and very often is very specific and thus lends itself to many forms of questionnaire research with its numerical questioning format (Babbie, 2006; Onwuegbuzie & Leech, 2006). This approach is well-suited to a substantial portion of the current project, as data captured in a quantitative manner allows the use of graphical displays and tables as a form of reporting the results, which are often seen as a quick and easy way to absorb large quantities of data in a simple, informative, and effective manner.

Thus, the method used in this research is a mixture of both qualitative and quantitative questions set out in an interview. By this method, the quantitative segments provide a framework which was then expanded upon by the interviewee by providing qualitative responses. This was seen as allowing the use of the best strengths of both methods, thus gaining the advantages provided by both techniques.

> A key feature of mixed methods research is its methodological pluralism or eclecticism, which frequently results in superior research (compared to monomethod research) (Johnson & Onwuegbuzie, 2004, p. 14)

4.4 Content Analysis and Structured Interviews

Utilizing the mixed method approach in the interview process allowed the Clinical staff to go further than just responding to direct questions with a numerical choice. By virtue of their extensive training, medical clinicians are ideally placed to think about and respond to questions that are relevant to the organisation and delivery of healthcare in New Zealand's publicly -funded system. The clinicians responded to the questions about healthcare management and elaborated on the relevant issues from their specialist area perspective.

Common limitations of a structured interview are often bias-orientated. These include bias due to poor construction, bias in the response to the questions, inaccuracies in the way the interviewee recalls situational details and a social-desirability bias. Limitations also include the over-reporting of good behaviour or positively perceived situations while downplaying bad behaviour or negative situations (Babbie, 2006; Grimm, 2010). To mitigate these issues, great care was taken to construct

the questionnaire in such a way that the questions were able to be answered in both a direct (quantitative) and expanded, in-depth contextual (qualitative) manner. In this way, each of the specialist healthcare clinicians were able to more comprehensively respond to questions about each issue from a different perspective that could be later analysed.

4.5 The Interview design

The interviews explored how the clinicians at the CDHB were affected in their clinical operations by the managerial and bureaucratic structure of the healthcare system they work within. The project focusses on what the clinicians see as successes and failures of the present healthcare setup and how successes may be amplified while weaknesses can be mitigated. The interview was primarily derived from the recurring themes that emerged from the literature review and consists of six sections focusing on these inter-related themes. These six sections are further described below.

Many of the questions were designed to be answered using a Likert scale response (strongly agree to strongly disagree). With the use of a voice recorder, the interviewee was encouraged to expand on their answers, giving a fuller descriptive explanation of their opinion, while also enabling them to expound both personal and professional beliefs.

The use of qualitative interviewing techniques have allowed this research to further explore clinicians' personal and professional feelings and opinions regarding the structure of the Canterbury District Health Board and how this structure impacts their clinical operations (Bowling, 2014). Bauman and May (1990) referred to this as “defamiliarising”, which allows the researcher to look for a fresh perspective on what is familiar. By asking more searching questions, or in a simple format, constantly asking “why” forced the clinicians to look at what may have become accepted or taken for granted as the status quo. The act of peeling back what had become ingrained within the social fabric of the CDHB, its culture and management structure, allowed the interviewee to expose areas that may be not have initially been mentioned or highlighted, yet could impact the clinical efficiency and efficacy in both a positive and negative manner. Pope and Mays (2013, p. 4) went on to expand on this by saying:

> Rather than simply accepting the concepts and explanations used in everyday life, qualitative research asks fundamental and searching questions about the nature of social phenomena.

Section One: The CDHB Board and the participant's relationship with it. Nine main questions made up this section, some of which have a combination of open-ended questions and rating scales. The initial question in this section asked if the clinician had perceived any synergy with the Board of the CDHB with regard to their position in the management structure, and if so how much benefit this afforded them in their office. The section goes on to explore the clinician's impression of population representation within the system, and if the board can be seen as a fair representation of the people of Canterbury. This was followed by an assessment of the manner in which the board are perceived to act, whether the policies, activities and guidance provided enhances the efficiency of the CDHB. They were then asked to provide a ranking of that performance from a clinical perspective. The final three questions concentrate on system governance and asked if this should be the responsibility of a board or by hired management, and if by a board, whether this should be composed of elected locals or appointed members. Finally, the clinicians were asked if the management function should be performed locally, centrally or by a mixture of both central and local groups. During the presentation of each question the interviewee was asked to both expand upon and explain why they were giving those answers.

Section Two: The CDHB Management. Six questions made up the second section and cover the areas of perceived management effectiveness and its interactions with the clinicians. As in the first section, the second section has a mix of both open-ended questions and rating scale questions. The set scale questions were followed up by asking why the clinician had answered as they did and if improvements could be made, and if so, how. The questions in this section focussed on clinical involvement with the management of the CDHB. I began by asking if the clinicians meet with management and if so, how often and about what. Questions two and three asked about the effectiveness of management at the delivery of healthcare and of managing clinical operations. Both of these questions were answered by rating from 1, Not effective to 5, Very effective and were followed up by asking if they thought this could be changed, and if so how. Question four asked about the role of the clinician in healthcare management and whether they though they should play a greater part. Again, follow up questions, if yes why, if no, why not, allowed the clinician to expand on their reasons. Question five, “in your experience is management responsive to clinical concerns” was answered using a scale of 1 representing unresponsive, to 5, totally responsive. The final question asked if the clinician thought healthcare for Canterbury should be managed locally, centrally or by a mix of both. Again, this was followed by the supplementary question of why?

Section Three: The Ministry of Health (MoH). Five questions made up Section Three and as in the previous two sections, there was a mixture of both open-ended and scaled responses. Again, all

questions were followed with the same prompting as described above for greater detail, asking if they thought this could be changed and if so how without impacting greatly on the time participants required for treating their patients. The section concentrated on the MoH, how the policies created by the MoH impact on clinician's decisions and if clinicians have enough or too little say on those decisions. The questions start by asking the interviewee the level of influence they have on healthcare policy created in Wellington and is answered by the scale rating of 1, no influence to 5, great influence. Question two asks if clinicians should have greater say on policy created by the MoH and if followed up with the supplementary question, why. Question three asks how much leeway the CDHB has implementing the MoH policy and here again the response was via the scale rating of 1 being none, to 5 being great leeway. The final two questions were designed to measure the perceived impact of MoH policy on clinical decisions and ask if clinicians believe the MoH should have greater of less control over clinical priorities. As in all other sections, participants were encouraged to discuss their responses in greater detail.

Section Four: Public Engagement in the Healthcare system. There are only two questions making up Section Four. The first is a direct question asking if the public should have any influence over the CDHB, and if so, how this could be achieved. The second question links back to the Board asking if the board chamber is the best place for a public debate on healthcare. As in the previous sections, both of these questions were followed up by asking the interviewee why they answered as they did and if they thought these procedures could be changed, how this could be achieved.

Section Five: Participant's experience of different Health models. Here again this section consists of only two questions but with a potential for five further explanatory questions. These centre around the clinician's experience of working in other healthcare systems outside New Zealand and how this compares to the present DHB structure. The first of the questions asks if the clinician has worked solely in New Zealand. If they answer "Yes", then the next three supplementary questions are skipped over. For interviewees answering "No", the questions explore which other countries they have worked in and the nature of their work environment in those locations. There was a question asking which of the healthcare systems they have worked in better suited them, and finally how the New Zealand healthcare model compares with those from overseas. Here again, these questions were followed up by asking why they answered as they did and how they felt the situations helped or hindered them in their clinical operations. The last question in Section Five asked how effective the CDHB model is at delivering optimal healthcare for Christchurch. This final question was answered in a scaled response between 1 and 5, where 1 equals "ineffective" and 5

equals “cured all the world's ills”. Again, this was followed up asking if they thought this should be changed, how this could be done.

Section Six: Participants’ Demographics. The final section consists of five questions asking the age of the interviewee, to which ethnic group they identify with, and the gender of the interviewee. It also asks which country they first qualified as a doctor, and how long they have been working within the CDHB.

4.6 Interviewee Selection and Size of the Group

This study limited the project to only one of the 20 health Boards in New Zealand, concentrating on the Christchurch city campus. The number of clinicians who were asked to participate, was restricted to 37. This is in keeping with Adler and Adler (1987), who advised between that 12 and 60 people should be used in a survey, where Ragin and Backer (1992) recommended between 20 and 50 people (Adler & Adler, 1987; Ragin & Becker, 1992). In this case, the 37-senior clinician’s that were selected were Clinical Directors (CDs), Senior Medical Officers (SMOs) and Academic Heads of Departments (AHoDs) covering all medical and surgical areas within the Christchurch hospital and thus constituted what is arguably a census rather than a sample. This group is thus viewed as being in a position to knowledgably respond to the questions in a way that represents the broadest range of CDs, SMOs, and HoDs. They are the main group of clinicians that would have a dual line of authority issue due to their responsibility statuses of both management and clinicians in the structure provided by New Zealand’s healthcare system. Clinical Directors embody the tensions and conflicts of the various managerial levels within the hospital setting, whilst attempting to placate and reconcile the demands of disparate and difficult professional colleagues (Thorne, 1997).

This multiplicity of roles provides the basis for the tensions this project was designed to observe and measure. The present structure that results in clinicians taking up positions within the management hierarchy while also holding the clinical role of administering healthcare to patients has been defined in the following manner by Doolin (2001, p. 249):

> The clinical leadership strategy can be interpreted as an attempt to influence clinical behaviour through cultural change within the medical profession by diluting or undermining professional values and norms with managerial ones.

Trying to gain a larger sample size would prove to be prohibitively difficult, consuming excessive time, and would need to include clinicians that are not Clinical Directors nor Academic heads of Department, nor as a consequence having much of the managerial responsibilities that are of interest to this study. As a result, they may not be able to comment authoritatively in all areas of the schedule and so were not sought for participation.

4.7 Development of the Interview

An interview can be either unstructured, running more along the lines of a general conversation (Burgess, 1982; Corbin & Morse, 2003) or in a structured manner where a conversation may still be had, but is guided in a purposeful manner to gain detailed information around specific topics (Babbie, 2006; Sternberg, Lamb, Esplin, Orbach, & Hershkowitz, 2002). An interview schedule was created using questions derived from the literature relevant to CDHB clinical operations. Because of the audience and the nature of the questions put forward by this research, a structured interview method was considered a better approach for this exploratory project (Bryman & Bell, 2015; Fox & Spector, 2000). This use of a mixed method allowed both qualitative and quantitative questions to be scattered though out the questionnaire resulting in greater detail (Dörnyei, 2007). This approach allowed the interviewee the opportunity to provide direct numerical answers to specific topics, while also offering the interviewee a forum for further expanding on the topics covered, letting both personal feelings and emotional attitudes to be presented. The use of direct interviews affords the interviewer some degree of empathy towards the interviewee, who may in turn become more open, revealing their unguarded thoughts.

> The interview has the potential to be an extremely sensitive device for the acquisition of valid and reliable data. Most people are more willing to talk and verbally react than write responses to questions (Adams & Schvaneveldt, 1985, p. 214).

Adams and Schvaneveldt (1985) went one step further, proposing that an interview may be more sensitive than a questionnaire when coping with issues of validity. As the basic structure of the research had concentrated on the five major factors impacting clinical operation, it seemed fitting to structure the questionnaire in the same manner. These five factors were shown in Figure 1, Chapter 1 Section 5, Research Objectives and Questions, and were the MoH, Management, Clinicians, the Public and the Board. These five factors of influence were then reviewed against the thesis questions, repeated below:

- Should the healthcare system embrace greater centralisation or greater regionalisation?
- Should the healthcare system be administered by a board or by management?
- Should the administrative governance team be elected or appointed?
- What degree of public participation should there be within the public healthcare system?

Using each of the five factors, this researcher was able to create a set of questions that related to the thesis questions. Because of the nature of the thesis, great care had to be taken with the wording of many of the questionnaire questions, the grouping of the questions in each of the five factors, and checks made to make certain both ethical and patient confidentiality laws in place within the New Zealand healthcare environment were not compromised (Hair, Wolfinbarger, Money, Samouel, & Page, 2015; Ruane, 2004). The questionnaire can be found in Appendix A.

4.8 Questionnaire Development and Pre-trial

Once the questionnaire was in a format where it could be presented to the clinicians, a trial was run with one of the specialist healthcare groups situated on the Christchurch campus. Five Senior Medical Officers, including the Clinical Director and academic head of department, plus the Charge Nurse Manager, were asked to provide feedback on the device. Because the trial group was relatively small, and all the interviewees were situated in the same department, it was decided that the best way to get everyone to participate would be to approach each person privately rather than sending out a letter requesting participation. Doing this also had the advantage of answering the numerous questions that were raised while also explaining in more detail why and what the thesis was about. Some of the responses to this initial round of interviews had the added benefit of helping to shed more light on the ”Bad Old Days” of the 1990’s, covered in Section 2.4.

Once all the participation forms for the trial participants were signed, randomly generated, unique four digit numbers were assigned to each questionnaire using an online random number generation tool (Urbaniak & Plous, 2013). A cross-reference sheet linking the participant to each form's unique number was kept until the trial was completed. Upon completion of the trial, the cross-reference sheet was destroyed, thus guaranteeing confidentiality.

The trial group were interviewed in early February 2015. The use of the trial group enabled the interview process to be fine-tuned. Results of this trial exercise were used to make minor changes to the questionnaire as well as to the delivery method. For example, within the trial-run the full questionnaire sheet was presented to the interviewee to read while each question was read out by the interviewer. The result of this process was that the interviewees tended to jump ahead and

answer more than one question at a time (Appelbaum, Marchionni, & Fernandez, 2008; Junco & Cotten, 2012; Wood et al., 2012). In an attempt to inhibit this sort of multitasking, and to re-establish their full concentration on the question posed, the questionnaire sheet was replaced with individual question prompt cards. These can be found in Appendix F.

The direct approach to the clinicians resulted in a 100% uptake for the trial group, and after many recommendations from the participants in the trial group, it was decided that continuing with this direct approach to all the clinicians targeted for inclusion in the sample would have a better chance of gaining full participation for the main project. Senior Medical Offices have to deal with a large volume of paperwork in their daily routines, and those SMOs that participated in the trial sessions believed that a letter of participation would not be the best way to get a prompt reply. In many cases, they suggested, it might result in no reply at all. Each potential subject was therefore approached individually and in person, asked to participate, and upon agreement, was asked to read and agree to participation via their signature on a release form.

Each of the interviews were recorded enabling transcription and later analysis. The initial interview using the full sheet for the interviewee lasted on average 30 minutes. Once the move to the laminated prompt cards was introduced, times for the interview increased to just over 52 minutes. In retrospect, as the trial group was a more isolated department within the Christchurch campus, it was no surprise to find that the interaction between the Board and the group was minimal.

4.9 The Interview

The interview protocol was adjusted in light of the trial run described above. After individually approaching each of the clinicians listed as candidate for the questionnaire, a work schedule was drafted allowing 90 minutes for each interview giving enough time to settle and answer any question the clinician may have regarding the study before commencing the interview. The ideal was to interview two clinicians a day, one in the morning after the clinical groups had completed patient ward rounds, with the second interview later in the afternoon. Due to the busy nature of clinicians' workloads, this was not always possible. Some days there were no interviews able to be scheduled and completed.

Each of the clinicians who agreed to participate in the research were interviewed in the same manner by the same interviewer, thus minimising the potential for interview bias. The interviews were conducted in the clinician’s private chambers, allowing them to relax in their own semi-private

surroundings. Having the interview held in an area where the clinician felt relaxed and more at ease was seen as a way to encourage them to expand on their answers by recalling experiences and in an unperturbed and confidential fashion. It also provided a degree of privacy where a meeting in the canteen or the clinicians' lounge may have resulted in an endless stream of interruptions from colleagues and junior clinicians regarding patient care. Finally, as the hospital is still recovering from earthquake damage, there is a shortage of usable meeting rooms.

The interviews were not totally free from interruptions, however. There were times where the clinician was interrupted by telephone calls from other clinicians around the hospital. This was unfortunate but because of the nature of the position held by the interviewees, being academic heads of department or clinical director for a specialist area, interruptions are a vital and potentially lifesaving part of their role. For the clinician being interviewed, this was seen as nothing out of the ordinary, and once the interruption was over, they were again able to give their full concentration to the questionnaire.

The same format for interviewee confidentiality described above was used for the main questionnaire administration. Once all the participation forms were signed, randomly generated, unique four digit numbers were assigned to each questionnaire using the same online random number generation tool used in the trial (Urbaniak & Plous, 2013). Care was taken to make certain none of the random numbers in the main questionnaire matched any numbers generated for the trial questionnaire. Here again a cross-reference sheet linking the participant to the forms unique number was kept until the interview was completed. Upon completion of the full interview schedule, the cross-reference sheet was destroyed, thus guaranteeing confidentiality for the participants.

The questions were presented in the format laid out in the interview schedule, but using the newly adapted prompt cards allowed the interviewee to concentrate on each question in turn. Each participant was encouraged to expand on their answers allowing the use of personal experiences or anecdotes that were captured with the use of a voice recorder for later transcription and analysis.

4.10 Analysis of Data and Interpretation of Findings

As the researcher, had spent much of the interview process focused on listening to the participants and recording their responses, there was a substantial volume of data to be analysed. Unlike quantitative data, there is little consensus as to how qualitative data should be analysed and interpreted (Silverman, 2006, 2011; Yin, 2013). Thus, to make certain the analysis was performed to

the highest standard, the researcher followed Yin (2013) principles of “good research”. Yin notes that components of qualitative analysis that scholars do agree upon are that the analysis should involve a degree of classifying, tabulating and examination of the data to make certain the responses address the initial research questions.

The analysis of the recorded data was a continual process throughout the thesis. The audio recordings were able to be reviewed shortly after the actual interview, allowing the identification of both emerging and common themes. From the discussions that had been recorded, positive responses were areas where clinicians had agreed “always” or “often” and negative responses matched the prompt cards categories of “seldom” or “never”. The themes, patterns and issues that emerged from the quantitative data were manually transcribed to cards and sorted into individually themed groups. These groups were later sorted into specific categories matching the five thesis questions in the same manner as the quantitative responses (Sommer & Sommer, 1991). Because of the nature of the responses and the audio recording of them, a number of direct quotes are presented in this thesis to provide broader contextual information to the analysis. These quotes allow for an added descriptive depth, providing greater insight to this research (Eisenhart & Howe, 1992; Miles & Huberman, 1994; Yin, 2003). Throughout this process there was a constant challenge to not lose or misplace any vital information or take a comment out of context, thus placing a different meaning to the words (Punch, 2013).

The numerical data results were transcribed, digitised, and analysed using routine methods. This data was transposed into graphical format and is presented and discussed along with the quantitative results within Chapter 5.

4.11 Chapter Conclusion

This chapter has put forward the definitions of both qualitative and quantitative research and why given the audience for the research, a mixture of both qualitative and quantitative questions were presented in the questionnaire. It has explained the reason why a semi structured technique was chosen and laid out how these decisions directed the layout and design of the questionnaire. It also justifies the strategic direction of the inquiry used for this project, a case study method using interviews with both quantitative and qualitative analyses.

This chapter also explained why the sample size was chosen and who would be in this group. The initial pretesting of the interview schedule was explained, along with reasons why one of the smaller

departments situated on the fringes of the hospital campus was picked to run the trial. Finally, the manner of data collection, tabulation, analysis, and the means of interpretation of the research data was covered.

The chapter also looks at the reasons why the board meeting minutes were reviewed, why the time period of 32 months was selected, and how the results from the board meeting analysis fitted in with the literature review of board in Section 3. This also looked at any interactions or presentations from the clinicians to the board in an educational manner.

Chapter 5

Results

5.1 Introduction

The previous chapter presented the method and ideas behind the capture of information from the clinicians at Christchurch Hospital. This chapter builds on the foundations laid in chapter 4, and is split into two main segments. The first of these segments analyses the results from the CDHB Board meetings for the two time periods covering 12 months prior to the September 2010 earthquake and 24 months post the 2010 earthquake. The second segment presents the results from the questionnaire sectioned into the areas identified as effecting clinical efficiency and efficacy. These being the CDHB Board, Management, the MoH, Public engagement, views of various healthcare models outside New Zealand and a final section reporting on responses to personal questions. The results from the trial questionnaire allowed for refining of the process that saw the interview times extended from an average of 30 minutes to 52 minutes, an increase of 73% in interview time. This highlighted the need for the voice recorder allowing time more time for later analysis and transcription. The findings from the results will be discussed in greater details in chapter 6.

5.2 CDHB Board Meeting Analysis

Board meetings for the CDHB are held monthly, usually on a Thursday from 9 am at The Princess Margaret Hospital, Christchurch. Within a year there are 11 meetings from February through to December with no meetings in January allowing for the Christmas and New Year holidays. The Chair for September 2009 through till August 2010 meeting was Mr. Alister James. Chair for February 2012 through October 2013 meetings was Mr. Bruce Matherson with deputy chair Mr. Peter Ballantyne standing in for Mr. Matherson during any absences. Agendas for the board meetings are largely determined by the Board's yearly work plan. The Board Chair agrees each agenda prior to release and there is no limit to the number of agenda items.

Table 6 shown below is split into a left potion for Board meeting results from the period pre-September 2010 earthquake and a right portion for post 2010 earthquake. The results looked at four areas for each of the points presented within the agendas and minutes for the periods covered. Did each of the points on the agenda create discussion at the board meeting (Points Discussed – Yes or No)? For each of the points on the agenda, was there more than one option offered (Options

Offered – Yes or No)? For each of the points on the agenda, was the motion passed or not (Motion Passed – Yes or No)? Finally, how many times for each of the points on the agenda did the Board request more information. "RFI – Yes or No".

Table 6 - Summary of Board minutes covering Points, Options and Motion

September 2009 through August 2010

	Points Discussed	**Options offered**	**Motion Passed**	**RFI**
No	45 48%	92 99%	1 1%	90 97%
Yes	48 52%	1 1%	92 99%	3 3%

February 2012 through October 2013

Points Discussed	**Options offered**	**Motion Passed**	**RFI**
48 44%	107 99%	1 1%	94 87%
60 56%	1 1%	107 99%	14 13%

Ninety nine percent of Motions on the agendas for both periods are moved and seconded (passed) even though 3% of those in the 2009 to 2010 period requested more information and 13% in the 2012 – 2013 period. What this does highlight is the increase of the number of times more information was requested. Though this may also highlight areas where the board, not being fully equipped with the clinical or healthcare management knowledge, are to a degree engaging in a form of rubber stamping and generally going along with decisions put forward by both the specialist within the healthcare system and the MoH (Kemp, 2006; Laugesen & Gauld, 2012, p. 141). This also fits with the idea put forward by Patton and Baker (1987) and Lipton and Lorsch (1992) that boards may ask for more information but they do not like to "rock the boat" and will generally agree with the proposal.

Within the meeting minutes, motions passed are recorded in the following manner using one or all of the points noted in the table below:

Table 7 - Grounds for passing Board meeting resolutions

ground(s) for the passing of this resolution	**Reference – Official Information Act 1982 (Section 9)**
Protect the privacy of natural persons.	S9(2)(a)
To carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations).	S9(2)(j)
Maintain legal professional privilege.	S9(2)(h)

During the pre-earthquake period of September 2009 to August 2010, 52% of the proposals put to the Board resulted in some form of discussion. This figure had risen to 56% for the two years' post-earthquake. The number of options offered for each point had not made any noticeable change between the two periods, staying level at 1% of points presented having more than one option for consideration. Schwartz-Ziv and Weisbach (2013) also noted that only 1% of the issues from the Board meetings studied within their research had more than one option to review.

It is worth highlighting the differences between the Board of the CDHB and the eleven organisations covered in the study by Schwartz-Ziv and Weisbach, none of which were directly involved in the delivery of healthcare. Unlike the Boards reviewed in Israel, were all members were appointed, the DHB members are a mix of both elected and Government appointed.

Table 8 is set out in a manner similar to table 6, split into a left column for Board meeting results from a period pre-the September 2010 earthquake and a right column for results relating to the period post 2010 earthquake. Within this analysis, the research looked into areas where the Board was able to interact with other members of the CDHB via presentations, deputation and discussions (as measured by pages of minutes). These were not restricted to only clinical or surgical, but were able to come from other areas within the CDHB. Presentations seemed to be a chance to educate the Board about the work or programmes being run within those specialist areas. Deputations were usually made by one or two people and were usually addressing a very specific point on behalf of an area or group. The total number of presentations and deputations for the period are presented, along with an average per meeting. The number of pages for the meeting minutes were also counted as a whole for the period as well as an average for the number of meetings.

Table 8 - Board meetings, Presentations, Deputations and Discussions.

	September 2009 through August 2010 (12)	***February 2012 through October 2013 (20)***
Total Presentations	5	24
Average Presentations	0.4	1.2
Total Deputations	2	4

Average Deputations	0.16	0.2
Total Pages	109	1705
Average Pages	9	85
Average Discussions	8	5

Where the numbers did change more markedly after the earthquake were in the number of presentations put to the Board. This leapt from five in the 12 months' pre-quake, to 24 in the 20 months following the earthquake. With an average of 0.4 presentations per meeting in the pre-quake period, the average increases by 200% resulting in an average of 1.2 presentations post-quake. Amongst these were a large proportion of information technology projects highlighting the impact of the earthquake on clinical and surgical areas and the importance of sharing electronic patient information. Along with this was recognition of a need for instant access to patient's medical records during any emergency that could bypass the delays caused when accessing historical paper records held in secure archives, often away from the hospital campus (Ardagh et al., 2012).

Understandably, the number of financial requests for major building work proposals that were being presented post-quake increased. As the CDHB suffered damage to all its hospital sites, including those in Ashburton, this is not surprising. Many of these requests were financial substantial and as such Board approval was required before work could proceed.

One of the other factors of the CDHB Board meetings, and a point raised by Schwartz-Ziv and Weisbach, was that Board meeting minutes only list discussion that takes place during the official meeting. This would not include any time spent in discussions that take place before the meeting starts. In the case of the CDHB, discussions that may take place during the breaks for morning tea, or during lunch. Even though the monthly Board meetings are open to the public, the public are excluded from certain portions of the meetings. There is no mention of any member(s) of the public making an appearance at any of the meetings. Board meeting times did not differ between the two time-frames reviewed. Meetings commenced at 9 am, and were set to finish at midday or 12.30 pm, followed by lunch and a chance for informal conversation.

5.3 Questionnaire Results

The invitations were individually delivered to each of the clinicians identified in the selection process in mid-January 2015. The interview process did not commence until March 2015 as many of the senior clinicians do not take time off over Christmas and New Year as this period is one of the busiest for the hospital. Because of the increase in patients during December and January many clinicians delay their summer holidays until February when the hospital is not so busy. Delaying the interviews until March allowed for this break. From the initial 37 invitations, 27 people (73%) agreed to be interviewed.

All the tables within Section 5.2 list results in question order and display results of that question in both the number of respondents as well as the percentage of respondents against each reply option. This is shown on each table as **n(%).** The reason for this was to follow the layout in the questionnaire as closely as possible. For questions that allowed a scale response, the response number is also shown at the top of each column.

5.3.1 Personal Questions

The objectives of the last section of the research were aimed at gathering personal details regarding the clinicians.

Table 9 - Questionnaire Section 6 Results n (%)

6.1	How old are you?	Average 53 years	Youngest 35 years	Oldest 66 years	Median 55 years	Mode 55 years	Range 31 years
6.2	What ethnic group do you identify with?	NZ 22 (81)	European 4 (15)	Something Else 1 (4)			
6.3	Gender	Male 19 (70)	Female 8 (30)				
6.4	In what country did you first qualify?	NZ 21 (78)	UK 6 (22)				
6.5	How long have you worked for the CDHB?	Average 21 years	Shortest 8 years	Longest 40 years	Median 19 years	Mode 15 years	Range 32 years

From the responses, the average age of the senior clinician within the Christchurch hospital is 53, the medium and mode both being 55 years. The average years' experience working in the CDHB was 21 years, with the median 19 and the mode of 15 years. This would mean many of Senior Medical Officers interviewed would have been employed by what was then Canterbury Health Limited in

1994, and as such would have had experience in the troubles referred to as “The Bad Old Days” (Anonymous Healthcare Worker #1, 2015).

One surprise was the ratio of males to females within the study group. Though females constitute a a large proportion of employees within the hospital, working within both the clinical and nursing areas, 70% of those who accepted this invitation to participate were male. This was commented upon by one SMO who raised a point about the perceptions of a “glass ceiling” within the New Zealand healthcare system when it comes to openings for women. The same “glass ceiling” was highlighted in studies by McManus and Sproston (2000) and Zhuge, Kaufman, Simeone, Chen, and Velazquez (2011) within both the clinical and surgical specialities of healthcare. This research was not designed to look at the perceptions or limitations that may or may not be viewed by the female clinicians, though with these results, this could certainly be an area of further study. The age range was just as surprising, with the youngest only 35 years, and the oldest 66. Lastly the length of the interview seemed to be positively correlated with the age of the interviewee -- older respondents took more time to reply during the interviews.

5.3.2 CDHB Board and Relationship With Members

The objectives of this section of the research were aimed at assessing the clinical relationship with the Board of the CDHB, and gaining a better understanding of the perceived role the Board should be performing from a clinical viewpoint. The results from the first section of the questionnaire are shown in Table 10.

Table 10 - Questionnaire Section 1 Results n (%)

1.1	Do you have any synergy with the Board?	No 15 (56%)	Yes 12 (44%)			
1.1a	If yes, to what benefit	1 No benefit 1 (8%)	2 1 (8%)	3 3 (25%)	4 4 (33%)	5 Very beneficial 3 (25%)
1.2	Do you think the Board needs to represent the local population?	No 1 (4%)	Yes 26 (96%)			
1.3	Do you think the elected Board members are a fair representation of the local population?	1 Not representative 0 (0%)	2 6 (22%)	3 19 (70%)	4 2 (7%)	5 Completely representative 0 (0%)
1.4	How effective is the Board at managing the delivery of healthcare?	Poor 2 (7%)	Fair 2 (7%)	Average 11 (41%)	Good 11 (41%)	Excellent 1 (4%)
1.5	Should the Board be primarily concerned with Supervising the delivery of Healthcare,	Monitoring 12 (44%)	Supervising 3 (11%)	Something Else 12 (44%)		

	Monitoring the delivery of health care, or Something else?					
1.6	Do you think the Board enhances efficient practice of the CDHB?	No 9 (33%)	Yes 11 (41%)	Don't Know 7 (26%)		
1.7	Do you think the governance role should be performed by elected locals, or appointed experts	Elected 1 (4%)	Appointed 3 (11%)	Both 23 (85%)	Not at all 0 (0%)	
1.8	Do you think the governance role should be performed by a Board or management?	Board 21 (78%)	Management 2 (7%)	Mixed 4 (15%)		
1.9	Do you think the governance role should be performed locally or centrally?	Locally 10 (37%)	Centrally 1 (4%)	Both 16 (59%)		

It is evident that even though the numbers of clinicians having some form of synergy with the Board are less than those with no synergy, 44% compared 56%, contact with the board is viewed in a positive manner. Synergy was defined as any form of personnel or professional contact, discussions or meetings that relate to work done for, or on behalf of the CDHB. On a scale from 1 being of no benefit to 5 being very beneficial, 58% of those who responded said the meeting were above average (4) to very beneficial (5). This compares to 16% who responded with below average (2) to no benefit (1). The remaining 25% of respondents gave an average reply of (3) neither very beneficial nor of no benefit.

Where clinicians were asked to explain why they had answered as they had, there was agreement that the Board were seen as a forum to counter what is often viewed from a clinical aspect as the "remote handling" of the health system by central Government. The following comment was made while also highlighting that the Board chair is appointed by the Minister of Health.

> There is a great need for a strong Board chair to stand up to both the MoH and the Minister of Health (Anonymous Healthcare Worker #7, 2015).

When asked if the Board needs to represent the local population, question 1.2, an over-whelming majority (96%) of respondents replied that the Board does need to represent the local population. Yet question 1.3 asked if the board members are a fair representation of the local population, 70% of those who responded did so with average score of (3) from a scale of 1 to 5, (1) being not representative and (5) completely representative. Seven percent responded above average (4), no one responded with completely representative (5). This compares to 22% who responded with below average (2), while no one from the selected group responded that the elected board were not representative of the local population (1).

By enabling local representation, the clinicians expected what was described as “postcode medicine” to be addressed along with a greater degree of equity in the way healthcare was delivered to the local residents. But the clinicians who raised these points did so with the statement that local representation had been unable to correct these issues.

> A need to reduce postcode medicine (Anonymous Healthcare Worker #8, 2015).

This comment refers to the perception that some postal areas are getting better medical care than others.

> Needs to be greater equity over healthcare delivery (Anonymous Healthcare Worker #9, 2015).

This may be viewed in the same manner as the comment on postcode medicine, but rather than covering set geographical areas, this was aimed at the ethnicity of those accessing medicine. The manner in which healthcare is delivered to certain ethnic groups may not be as culturally acceptable as the manner of delivery to others and in so doing there was a view that not all the healthcare benefits are fully achieved.

As each DHB has different requirements and faces different issues, the clinicians interviewed believed the Board was able to act as the conduit between management and clinical governance groups within the CDHB and the decision-making powers in the MoH.

Question 1.4 “How good is the board at managing the delivery of healthcare”, 14% responded with Poor (1) to Fair (2), 41% responded with average (3), and 45% responded with Good (4) to Excellent (5). Even though a greater percentage of clinicians have no synergy with the Board, 56%, there is a perception amongst the clinicians that the Board are doing a good job at managing the delivery of healthcare for the people of Canterbury.

For question 1.5, 44% percent of respondents believed the Board should be involved with “monitoring” the delivery of healthcare, compared to 11% who believed they should be “supervising” the delivery of healthcare. The remaining 44% believed the Board should be involved in something other than “supervising” or “monitoring”, but were unable to state what that something else was. One factor that was raised by a clinician that may affect the long-term role of the Board was a lack of any measurement or reporting to show if the Board was achieving the goals set out by Government.

Question 1.6, “Do you think the Board enhances efficient practice of the CDHB” had a greater percentage, 41%, responding “Yes” they do enhance the efficient practices of the CDHB, compared to 33% who responding “No” they do not enhance the efficiency of the CDHB. This must be tempered with a high percentage of don’t knows, 26%.

The last three questions for this section asked for views on the governance role for the CDHB. Question 1.7, “Do you think the governance role should be performed by elected locals or appointed experts?” Question 1.8 “Do you think the governance role should be performed by a Board or Management?” and question 1.9 “Do you think the governance role should be performed locally or centrally?” Eight-five percent responded to question 1.7 saying this should be made up from a mix of both elected and appointed representatives. Seventy-eight percent responded to question 1.8 that governance should be managed by a Board, and 59% responded to question 1.9 that the responsibility should be performed both locally and centrally.

It can be stated that clinicians surveyed think the Board is having a positive effect on the management of healthcare for the CDHB. That the Board should be both representative of the local population as well as having a number of elected professionals, though the present method of gaining some form of public representation could be changed. With only 41% of respondents agreeing that the Board enhances the efficient practice of the CDHB, and 44% of respondents uncertain as to the role of the board when it comes to the delivery of healthcare, now may a good time to look at the Board model recently implemented by the primary healthcare sector within Canterbury.

The following definition of primary healthcare is taken from the MoH web site and goes on to state:

> Primary health care relates to the professional health care provided in the community, usually from a general practitioner (GP), practice nurse, pharmacist or other health professional working within a general practice (Ministry of Health, 2014b).

The manner in which the primary and secondary health sectors manage public participation was raised by a senior hospital clinician who highlighted that the primary healthcare sector has moved away from an elected public Board and adopted a more conciliatory, advisory Board.

> The Primary Health Sector in Christchurch replaced the public Board with a community advisory Board (Anonymous Healthcare Worker #10, 2015).

The Board were seen as the group who were “Steering the ship so to speak” (Anonymous Healthcare Worker #1, 2015)

5.3.3 CDHB Management

The objectives of this section of the research were aimed at assessing the clinical relationship with the management of the CDHB. Gaining a better understanding of the perceived role of management with the running of the hospital, and whether clinicians felt that they should be taking a greater lead, or being jointly involved with the management teams.

Table 11 - Questionnaire Section 2 Results n (%)

2.1	Do you meet with CDHB senior management?	No 5 (19)	Yes 22 (81)				
2.1a	If yes, how often?	Daily 3 (14)	Weekly 5 (23)	Fortnightly 3 (14)	Monthly 6 (27)	Quarterly 2 (9)	Longer 3 (14)
2.1b	If yes, about what?	Clinical 1 (5)	Operational 4 (18)	Personnel 0 (0)	All 3 17 (77)	Something Else 0 (0)	
2.2	How effective is DHB management at the delivery of Healthcare to Canterbury?	1 Not effective 0 (0)	2 1 (4)	3 4 (15)	4 17 (63)	5 Very effective 5 (19)	
2.3	Do you think the present management structure is effective managing clinical operations?	1 Not effective 0 (0)	2 3 (11)	3 10 (37)	4 13 (48)	5 Very effective 1 (4)	
2.4	Do you think clinicians should have a greater role in Healthcare management?	No 5 (19)	Yes 22 (81)				
2.5	In your experience, are management responsive to clinical concerns?	1 Unresponsive 1 (4)	2 3 (11)	3 7 (26)	4 14 (52)	5 Totally responsive 2 (7)	
2.6	Do you think Healthcare for Canterbury should be managed locally, or centrally	Locally 13 (48)	Centrally 0 (0)	Mixed 14 (52)			

Interaction between clinicians and management showed that 81% of respondents meet with management, and the majority of these meetings happen month or sooner (78%). From these meetings 77% of respondents cover most aspects that may affect a senior clinician, being clinical, operational and personnel. Of the remaining respondents, 9% meet with management quarterly and 14% go longer than 3 months between meetings. In comparison to the 77% of clinicians who meet management on clinical, operational and personnel matters, 5% cover only clinical matters and 18% only operational matters.

The result from question 2.2, giving a scalar response from (1) not effective to (5) very effective, showed that the management teams could be seen as effectively managing the delivery of healthcare for Canterbury. With 82% responding with above average (4) to very effective (5), 15% of those that responded did so with an average score of 3, and 4% responded with below average (2). No one responded saying management were not effective (1).

Question 2.3 presented another scalar response to the effectiveness of management to clinical operations. The scale was the same as that in 2.2 with (1) being not effective to (5) very effective. Of those who responded 37% believe the management are doing an average job managing clinical operations (3), 52% responded with above average (4) to very effective (5) and 11% with below average (2). None of the clinicians responded with a ranking of (1) not effective. The following comment from an interviewee highlighted the constructive approach taken by the CDHB.

> There is no management and clinicians within the management teams, its clinical and non-clinical working in partnership (Anonymous Healthcare Worker #4, 2015).

Even though the response shows that management are perceived as far more effective today, compared to "the bad old days" in mid to late 1990's one comment stands out and was relevant to many of the smaller clinical units.

> Management and the Board need to visit clinical sites more often to get a greater appreciation of what each clinical department actually does, and some of the issues they face (Anonymous Healthcare Worker #1, 2015).

This feeling that things are presently better now than have been in the past was backed up with the following quote from one of the more Senior Medical Officers.

> Do not change or reorganise for the sake of re-organising as clinical staff are very much against restructures / re-organisation, as this has a tendency to adversely affect patient care (Anonymous Healthcare Worker #5, 2015).

Though this could also be viewed in a different light, one that looks at the impacts of organisational change from a patient perspective. Reviewing what has happened in the past for the CDHB, reorganisation in the 1990s did result in adverse patient events.

For many of the clinicians there were comments that the Christchurch hospital campus was somewhat remote from the administration centre based at The Princess Margaret Hospital. The two teams, senior management and the Board, were often viewed as faceless aspects of the CDHB governance committees.

When asked if clinicians should have a greater role in healthcare management, question 2.4, the response was a resounding yes from 81% compared to only 19% saying no. To support the idea that clinicians should be engaged within the healthcare management of the CDHB, clinicians are encouraged to step up and aid the management teams by allowing a percentage of their working time to be devoted to non-clinical activities. This was highlighted by one of the following interviewees who said:

> 30% of a senior clinicians time is allowed for non-clinical work (Anonymous Healthcare Worker #6, 2015)

One of the great advantages clinicians have over the management teams was also highlighted:

> Clinicians often work in many physical locations within the New Zealand DHB system, as well as within the primary and private sectors of New Zealand. Many have worked overseas experiencing the range of both centralised Government managed systems, to individually managed, private hospitals. On average, the DHB management teams have not had such varied health experience (Anonymous Healthcare Worker #11, 2015)

The question on managements responsiveness to clinical concerns, question 2.5, presented a scalar response of (1) unresponsive to (5) totally responsive. Clinicians who replied to this question gave results of 59% of (4) above average to (5) totally responsive, 26% as (3) average and 15% (2) below average to (1) unresponsive. This positive reply to managements responsiveness to clinical concerns may link back to the statement of "clinical and non-clinical working in partnership" (Anonymous Healthcare Worker #4, 2015) and how this has fostered a closer relationship between the two groups.

Responding to question 2.6 "Do you think Healthcare for Canterbury should be managed locally or centrally?" 52% of those who responded favoured a mixture of locally and centrally organised system compared with 48% of those who responded favouring a local management structure. None of the clinicians interviewed thought the system should be centrally managed in a manner similar to the UK. These responses came with a degree of experience of the British NHS system as 74% of those interviewed had worked in the NHS in England or Scotland at some time.

Below are a few of the comments that were raised while covering the questions in Section 2 of the questionnaire.

> The greater the DHBs grow the less effective they are at delivering local healthcare and acting on local issues (Anonymous Healthcare Worker #12, 2015)

> More management = less efficiency, Less management = greater efficiency (Anonymous Healthcare Worker #12, 2015)

This comment was echoed many departments who may be considered small to mid-sized when looking at the numbers of clinical employees, yet are no less important when dealing with the health and wellbeing of the Canterbury public.

> Management do not see the need for some of the small specialist areas, yet when these areas are viewed nationally by the Ministry of Health, they are classed as clinically important for the wellbeing of New Zealand, and New Zealanders (Anonymous Healthcare Worker #1, 2015).

The conflict around regional and national funding for certain clinical initiatives was something that came up time and time again during the interviews. This was often seen as something outside the sphere of many clinicians influence and unsupported by both management and the Board.

> Regional initiatives are often poorly funded (Anonymous Healthcare Worker #13, 2015).

> National and greater regional initiatives need to be top sliced for funding and not have it taken from the DHB budget (Anonymous Healthcare Worker #13, 2015).

5.3.4 The Ministry of Health

The objectives of this section of the research were aimed at assessing the clinical relationship with the MoH. How much influence the MoH have over clinical decisions, and if the CDHB has a degree of leeway when implementing healthcare policy created by the MoH.

Table 12 - Questionnaire Section 3 Results n (%)

3.1	How much influence do you have on healthcare policy created by the MoH?	1 No influence 7 (26)	2 11 (41)	3 4 (15)	4 4 (15)	5 Great Influence 1 (4)
3.2	Do you think clinicians should have a greater say in MoH policy decisions?	No 6 (22)	Yes 21 (78)			
3.3	How much leeway does the DHB have when implementing MoH policy?	1 None 3 (11)	2 9 (33)	3 9 (33)	4 5 (19)	5 Great Leeway 1 (4)
3.4	Do you think the MoH should have less, or more say in how the CDHB prioritises clinical initiatives?	Less 9 (33)	More 2 (7)	Balanced 16 (59)		

3.5	How much impact does the MoH have on your clinical decisions?	1 None 8 (30)	2 12 (44)	3 4 (15)	4 2 (7)	5 Complete control 1 (4)

Question 3.1 was again set out in a scalar rating from (1) no influence to (5) great influence. The response to 3.1 regarding clinicians influence on the creation of Ministry policy showed that even though the clinicians selected were the most senior within their field operating from Christchurch hospital. That many of them were working in a number of other hospitals around the South Island in a similar role, 67% of those who responded felt they had (2) below average to (1) no influence on MoH healthcare policy creation. At the other end of the scale only 19% percent of those who responded felt they had (4) above average to (5) great influence over the creation of MoH healthcare policy. The remaining 15% of those who responded felt they had (3) average influence on the creation of MoH healthcare policy.

When asked if clinicians should have a greater say in policy decisions, question 3.2, the majority, 78% of those who responded, said they should have a greater say in MoH policy decisions. The remaining 22% said that the clinicians did not need a greater say in MoH policy decisions. Expanding this question and asking how clinicians could have a greater voice in MoH policy decisions, it was felt this could be better achieved via the Council of Medical Colleges (CMC) rather than via individuals themselves. The following is taken from the CMC web site.

> The Council of Medical Colleges is the recognised, trusted and authoritative collective voice for the Medical Colleges in New Zealand. CMC is able to provide well-informed opinions and advice to Ministers, Government agencies and other relevant bodies on health, post graduate medical training, and workforce issues ("Council of Medical Colleges," 2012) ©Council of Medical Colleges 2012.

Question 3.3, asking how much leeway the CDHB has when implementing MoH policy, again offered a scalar response of (1) none, to (5) great leeway. Of those who responded, 44% answered (2) below average to (1) none, 23% answered (4) above average to (5) great leeway. While 33% thought the CDHB had (3) average leeway when implementing MoH policy.

Question 3.4, do you think the MoH should have less or more say in way the CDHB prioritises clinical initiatives was answered by 33% of respondents favouring less, 7% more and 59% felt there is a reasonable balance at present. Overall, regardless of national policies driven by the MoH, or changes in Governments and a shift in healthcare, the effects on clinical decisions was viewed as minimal. Question 3.5 offered a scalar response from (1) none to (5) complete control asking how much impact does the MoH have on your clinical decisions. Of those who responded 74% felt there was (2)

below average to (1) no effect, 11% (4) above average to (5) complete control and 15% responding (3) average impact. When the clinicians were asked to expand on why and how, it became apparent that the feelings towards the MoH was not quite so cordial. Many clinicians seemed to regard the Ministry as an entity that is putting too many ineffective and inefficient regulations with little to no monitoring of the effects or those regulations. At times, some of the comments regarding the MoH could be compared to those expressed during the 1990s battle between the CDHB Board, management, and the clinicians. Regardless of any feeling of antipathy to the MoH, comparing this to the answer to question 2.6 "Do you think Healthcare for Canterbury should be managed locally, or centrally?" The response was slightly in favour of a mix of both locally and centrally, and at present this central body is the MoH.

5.3.5 Public Engagement

The objectives of this section of the research were aimed at assessing how the clinicians viewed public input when it comes to managing the CDHB, and if the Board chamber was seen as the best place for public debate.

Table 13 - Questionnaire Section 4 Results n (%)

4.1	Should the public have any influence in how their DHB is run?	1 No influence 1 (4)	2 4 (15)	3 6 (22)	4 12 (44)	5 Great influence 4 (15)
4.2	Do you think the Board chamber is the best place for a public debate on healthcare?	No 22 (81)	Yes 5 (19)			

The area of public engagement is something many health systems around the world constantly struggle with and New Zealand is no different. As pointed out earlier, the turn out in the last local body elections for the CDHB Board was one of the lowest on record. Yet the majority of clinicians believe that the public should have some influence on how their DHB is run. Question 4.1 asked if the public should have any influence on how their DHB is run, this was responded via a scale rating of (1) no influence to (5) great influence. Fifty-nine percent of clinicians interviewed responded by saying the public should have (4) above average to (5) great influence. This compares to only 19% who said the public should have (2) below average to (1) no influence. The remaining 22% responded with (3).

Once the public Board is elected, they may then be seen as the public voice within the CDHB, which may explain why 81% of respondents to question 4.2 did not think that the Board chamber was the best place to hold a public debate on healthcare.

5.3.6 Your Experience of Different Health Models

The objectives of this section of the research was aimed at assessing the variety of differing healthcare systems clinicians have worked within, and comparing those healthcare systems to the system in place in New Zealand.

Table 14 - Questionnaire Section 5 Results n (%)

5.1	Have you worked solely in New Zealand?	No 23 (85)	Yes 4 (15)				
5.1a	Where else have you worked?	UK 20 (87)	Aus 11 (48)	South Africa 2 (9)	Canada 2 (9)	USA 2 (9)	Zim 1 (4)
5.1b	Which healthcare model is better suited to you	NZ 26 (96)	Aus 1 (4)				
5.1c	How does the DHB model compare	1 Less effective 0 (0)	2 1 (4)	3 5 (22)	4 13 (57)	5 Very effective 4 (17)	
5.2	How effective is the DHB model at delivering optimum healthcare for Christchurch?	1 Not effective 0 (0)	2 0 (0)	3 5 (19)	4 18 (67)	5 Very effective 4 (15)	

Nb: The results to question 5.1a total to a figure greater than the number of clinicians surveyed. This is because many of the clinicians have worked in more than one country, so the same clinician may be registered against one or all of those shown. Also, the percent figure shown is a percentage of all the clinicians interviewed and not a percentage of those who answered No to question 5.1. The follow quote supports the high percentage of clinicians who answered No to question 5.1:

> Clinicians often work in many physical locations within the New Zealand DHB system, as well as within the Primary and Private sectors of New Zealand. Many have worked overseas experiencing the range of both centralised Government managed systems, to individually managed, private hospitals. On average, the DHB management teams have not had such varied health experience (Anonymous Healthcare Worker #14, 2015).

For the 15% of respondents who had not worked outside New Zealand, questions 5.1a, b and c were skipped over. The 85% of clinicians who had worked outside New Zealand in a role as a clinician, 74%

have worked in the NHS in the UK, 41% in Australia, 7% in South Africa, 7% in Canada and the USA and 4% in Zimbabwe. Ninety-six percent responded that the New Zealand system was the one they felt better suited to them, the remaining only 4% responded that another healthcare system was better suited to their form of medicine. Ranking the CDHB against other healthcare systems they had experienced was done using a scale response of (1) less effective to (5) very effective. Seventy-four percent responded that the CDHB was (4) above average to (5) very effective, with 4% responding with (2) below average, and none responding with (1) less effective. The remaining 22% responded with a score of 3.

The effectiveness of the DHB model to deliver optimal healthcare for Christchurch, question 5.2, was also done using a scale response of (1) not effective to (5) very effective. The results were resoundingly positive with 82% responding with (4) above average to (5) very effective and 0% responding with (2) below average or (1) not effective. Nineteen percent of those who responded did so with (3). The following comment was made as a comparison between secondary healthcare and the Public Health sector.

> Public health is a poor cousin and often homeless when dealing with the Minister and MoH (Anonymous Healthcare Worker #15, 2015).

Chapter 6

Summation of findings

6.1 Introduction

The previous chapter presented the resulting information from the questionnaire survey of senior clinicians from Christchurch hospital, this chapter expands on those results, discussing the findings and expands on how these link to the research laid out in chapters 2 and 3. To manage this the 6 sections from the questionnaire are linked to the core structural concepts that underpin the research, these being the administrative distinction between the Boards or management, elected versus appointed memberships, centralised versus decentralised structure, and the degree of public participation. This chapter concludes with a summary of the findings, looking back to the four key questions set out in Section 1.5, concluding with areas that could be researched in greater detail.

6.2 Boards or Management

The objectives of this section of research was to review the findings from the questionnaire concerned with either the CDHB Board or management teams and link these findings back to previous studies highlighted from the literature review in Chapters 2 and 3. To establish what if any relationship the clinicians have with either the Board of governance for the CDHB and the management team and to use this to answer if governance should be a role for the Board, or if this role is better to be managed by the management teams and if so what role is left for the Board.

Within the Board meeting analysis, the time spent on Board discussions has moved post-earth quake to cover a greater number of matters regarding finance, which may highlight a shift from the original philanthropic-style seen in the late 1800s to a style more in line with corporate organisations. This seems to agree with (Scally & Donaldson, 1998, p. 61) who found that within the NHS “board agendas and management meetings have become dominated by financial issues and activity targets.” This realignment of the Board of the CDHB again highlights a greater requirement of the Board for financial management and guidance yet a lack of these very requirements was noted by Laugesen and Gauld (2012, p. 11) saying that many candidates holding the elected Board positions with the New Zealand DHB system lack the skills sets to fully perform the roles expected of them.

The results of the analysis of the CDHBs minutes show that on average, 99% of all motions are accepted. These findings agree with the Israeli study that found boards usually go along with the CEO wishes (Schwartz-Ziv & Weisbach, 2013) and often the boards only options are to accept or reject a specific proposal made by management (Chakraborty & Yilmaz, 2010; A. Patton & Baker, 1987). The number of options offered to the CDHB board were no different. Pre-the 2010 earthquake 98% of points discussed had only a single option to consider. Post the 2010 earthquake this figure was unchanged at 99% of points discussed having only a single option to consider.

The number of points that created general discussion increased from 52% pre-2010 earthquake to 56% post the 2010 earthquake. The largest change between the pre-and post-quake board meeting was with the number of requests for information. Pre-2010 earthquake this was recorded at only 3%, compared to 12% post 2010 earthquake. At the same time as the board were seen to request more information, the number of presentations put forward to the board jumped from 5 pre-2010 earthquake to 24 in the time studied post 2010 earthquake. Even though the board may be seen as requesting more information, and even questioning the points put forward in the minutes, the number of motions passed during the meetings remained the same at 98-99%, and here again this is in agreement with the findings from Schwartz-Ziv, Weisbach, Patton and Baker.

When asking clinicians how effective the Board are managing the delivery of healthcare for the CDHB, 81% of respondents rating the Board with a 3 or 4, with only 4% excellent (5). When asked how the Board may perform the role required to manage the delivery of healthcare, whether the role should be more aligned to the monitoring or supervising of the delivery of healthcare, the result showed that 88% of those responding was evenly split between monitoring the delivery of health care and something else. Of the 44% of clinicians who responded with Something else to question 1.5 “Should the board be primarily concerned with Supervising the delivery of Healthcare, Monitoring the delivery of health care, or Something else?” eight out of the twelve made comments that at present the Board are often involved in both a supervising and monitoring role. This may align with the findings by Schwartz-Ziv and Weisbach (2013), where Boards within the corporate sector are often split into the two distinct types. The questionnaire did not expand on what the 44% of clinicians responding to question 1.5, should the Board be primarily concerned with Supervising the delivery of healthcare, Monitoring the delivery of healthcare, or something else, thought something else was.

When questioned if the Board enhances the efficient practice of the CDHB, results were mixed, 41% of respondents saying yes, the Board enhanced the efficient practice of the CDHB where 33% of respondents said they did not enhance the efficient practice of the CDHB. Twenty five percent of

respondents answered “Don’t know”, while much of the feedback when expanding the question asking why or why not, centred around improved efficiency of the CDHB as a whole. The Board were seen as the group who were “Steering the ship so to speak” (Anonymous Healthcare Worker #1, 2015), and improvements made within clinical areas inside the Christchurch hospital can be seen as something that have been allowed to happen as a result of the actions from both the Board and management. Without the Board and management working together in this way, these improvements may not have happened in the manner that they did. This can be tempered with the following that was put forward as a manner in which improvements and efficiency gains is slowed, or at times stifled, causing both frustration and a degree of concern:

> Both decisions and initiatives are very slow to filter down from the Board due to the great number and committees, sub committees and HAG (Hospital Advisory Group) meetings (Anonymous Healthcare Worker #2, 2015)

The governance role was something clinicians believed the Board and not management should be responsible for. Question 1.8 returned 77% in favour of the Board, but this role should be done with a mixture of local and central Government input, question 1.9, returning 59% in favour of a mixed role. The present selection process for locally elected members links back to question both the ability to fully represent those locals who have elected the members, as well as the skill sets of the elected members to perform the governance roll required within one of the south islands largest and most complex organisations (Birchfield & Mueller, 2010; Laugesen & Gauld, 2012, p. 11). These results may agree with the findings in the section on centralised or decentralized governance structure where Liesbet and Gary (2003) and Siggelkow and Levinthal (2003) claimed there is as yet no general consensus on how this can be achieved or which leads to higher performance output.

The relationship between management and clinicians was more established than that between the Board and clinicians with 81% of clinicians meeting on a regular basis with management compared to 44% who any synergy with the Board. This was also reflected in the perceived efficiency of the management teams, 82% of clinicians surveyed responding with good to excellent for management effectiveness at the delivery of healthcare to Canterbury, compared to 45% of those who responded thought the Board were good to excellent at managing the delivery of healthcare. Eighty-one percent of the clinicians that responded believed that there was a place for the clinicians to take a greater role in healthcare management. This view of clinicians and management working together was summed up by a clinician in the following statement:

> There is no management and clinicians, its clinical and non-clinical working in partnership (Anonymous Healthcare Worker #4, 2015).

How this partnership can be strengthened again opens an area of further research as the longer a clinician spends on management tasks, the less time that clinician has to spend on clinical tasks. Encouraging clinicians into a greater role alongside those of management does seem to be recognised by the CDHB management with the following practice allowed for clinicians.

> 30% of a senior clinicians time is allowed for non-clinical work (Anonymous Healthcare Worker #6, 2015).

Time spent on management tasks is highlighted in Section 3.3.2. where Thorne (1997) noted the potential threat to the clinician's professional identity, autonomy and collegiality, and Smith (1955) outlined the dual roles of authority created as clinicians taken on more management tasks becoming accountable to both management and clinical structures.

Though there is nothing to say this time must be spent assisting management, a few of the clinicians who did respond use this time to clear paperwork and catching up on clinical studies and reports that build up over the weeks and months. An area highlighted in the literature review, Section 3.2.1. that may help to strengthen the argument for management over Boards, was the fact that healthcare workers may have a tenancy to undermine Boards by constantly questioning their ability to relate too, or identify too the very healthcare system they are associated with (Martin, 2008b).

As the Board seem to be spending more and more time on financial matters for the CDHB, as highlighted in Section 5.1 there could be case to say that Boards have moved away from the philanthropic-style of the late 1800 towards a more corporate style often seen within many non-government organisations. With the declining turnout for local body elections it could be argued that the public no longer values the election process for the DHB Boards and that the election process as it stands may be excluding large sections of society. If so this would agree with the findings from the NHS (Pfeffer, 1995) where public forums may activly seek to exclude the very public they represent by classifiying them as "special interests" (Pfeffer, 1995) and that excluding them is "often done for their own good" (Littlewood, 2001; Prior, 1999). With the lack of the desired skill sets of the elected members (Barnes et al., 2003) now may be a good time to review if the elected members of the Boards of the DHBs are still required in their present format. The following is extracted from the New Zealand Public Health and Disability Act 2000 (2015)

> The Board of a DHB must delegate to the Chief Executive Officer of the DHB, under clause 39 of Schedule 3, the power to make decisions on management matters relating to the DHB.

With a perceived lack of governance and guidance experience provided by the elected Board members, elected Boards could be removed altogether and any supervisory role done by the Ministry of Health in Wellington, who already monitor DHB performance. The Public Health and Disabilities Act goes on to state:

> The Minister may give a direction to all DHBs to comply with stated requirements for the purpose of supporting Government (New Zealand Public Health and Disability Act 2000, 2015)

With 44% of clinicians responding that the DHB had (2) below average to (1) no leeway when implementing MoH policy and 78% saying they or the Council of Medical Colleges should have a greater say in MoH policy decisions. The removal of the elected Board representing the general public could be enacted at the same time as the CMC were allowed a greater voice in the MoHs directional healthcare decision making process as well as aiding with the supervision of DHBs in how these decisions are implemented. The MoH presently monitors a DHB and the Minister has the power to remove a Board and replace them with a commissioner:

> Where the Minister is seriously dissatisfied with the performance of a board of a DHB, the Minister may, by written notice to the board and the commissioner, dismiss all members of the board and replace the board with a commissioner (New Zealand Public Health and Disability Act 2000, 2015).

The Government has recently taken such steps when it removed the Board from the Southern District Health Board in June of 2015 citing an operating deficit of between 30 and 42 million New Zealand dollars. This was quoted as accounting for over half the combined deficit of the remaining 20 DHBs (Foden & Weaver, 2015). Patton and Baker (1987) argued that boards more often refuse to rock the boat, which generally results in a Board agreeing with the directions put forward by the CEO, though they may ask for further information (Lipton & Lorsch, 1992).

6.3 Elected or Appointed

The objectives of this section of research was to review the make-up or structure of the Board of the CDHB. Should the Board be fully appointed by the central Government, fully elected by the local population, or would a mixture of elected and appointed representative offer a better solution, or is

there another alternative. From the answer to the questionnaire section about governance being performed by elected locals or appointed experts, 85% of the clinicians who responded said there should be a dual role of both elected locals and appointed experts. But with local support for the CDHB Board elections declining, as shown in local body election turnouts in figure 5, Section 3.2.3, it seems as if the same level of support for local representatives may not be as important to the public of Canterbury. The research has shown that globally, healthcare systems are struggling to gain support for any form of public participation in the election process (Lomas, Woods, & Veenstra, 1997). Martin (2008a, p. 36) went on to state:

> [P]ublic participation is seen to fall short of its promise to provide a direct, more-than-tokenistic, say in the governance of health to the public.

With less support from the local population for local elections, the very validity of the elected representatives is being questioned by Governments (Baggott, 2005; Birchfield & Mueller, 2010). To further the idea of a fully appointed Board, Alexander and Lee (2006) looking at not for profit hospitals in the USA stated that:

> [H]ospitals governed by boards using a corporate governance model, versus hospitals governed by philanthropic-style boards, were likely to be more efficient.

When looking at primary care groups (PCG) in the UK, the findings of the NHS highlighted that public Boards do not provide the guidance to the healthcare system that is expected, if anything all they did was to create a degree of uncertainty (Rowe & Shepherd, 2002). Pfeffer (1972) and Westphal and Zajac (1998) went on to claim that Boards are often ineffectual when it comes to making organisational decisions and the only role that may be left to the Board is representing the local population.

Rewards for those elected to the present DHB positions are “modest” in comparison to the rewards paid within industry and this may be one reason for the lack of candidates with the suitable skills (Laugesen & Gauld, 2012, p. 11). With 96% of clinicians responding to the question “Do you think the Board should represent the local population?” answering Yes, there can be no doubt that public representation is seen as important for the Canterbury region, and presently this is achieved by the elected members. This was backed up with the response to the question on public influence in how the CDHB is run. Fifty-nine percent of the clinicians who responded felt that the public should have some (4) influence in the running of their DHB, yet 70% of respondents felt the present board structure is only an average (3) representation of the local population.

Katz, Conant, Inui, Baron, and Bor (2000) have introduced the idea of a council of elders acting as a conduit between clinicians and the community. Within the Canterbury region, the Pegasus PHO have replaced their elected Board in favour of a community Board made up of only appointed members selected from various business and healthcare professions. The introduction of the governments pharmacy and drug buying agency PHARMAC in 1993 is another sector of the New Zealand Healthcare industry that has a Board made up of only elected professionals (PHARMAC, 2016). The question of elected locals or appointed professionals may presently favour a move toward a Board in the same manner as that introduced by the Canterbury PHO, but by doing so this may also result in the removal of public participation that is seen as important by the clinicians working in the system.

6.4 Centralised or Decentralised

The objectives of this section of research was to explore the preference between a centralised healthcare system, the likes of the NHS, or the decentralised regional system with centralised input presently in place in New Zealand. The question about central or local management for healthcare, question 2.6, resulted in a response of 52% of those who replied to the question in favour of the present mixed structure compared to 48% of those who responded in favour of a locally, fully decentralised structure. These may figures would agree with the finding from Rico and Léon (2005) who pointed out that presently there is no solid conclusion about which system is clearly better, there is a small majority that favour the present decentralised system with centralised input.

Question 1.9 asked if governance should be performed locally or centrally, resulting in a larger number of clinicians, 59% of those who answered, favouring a dual role consisting of both local and central input, compared to 37% in favour of a local governance and only 4% in favour of central governance. Although the results may be in line with the direction presently being taken by many other countries towards greater decentralisation (Bardhan, 2002; Magnussen et al., 2007), the same may not be the case in New Zealand as the number of regional healthcare centres has decreased from 46 in 1925, to 20. This number may further reduce as the West Coast DHB is managed by the same CEO as the CDHB, and South Canterbury DHB is becoming more dependent on the CDHB with regards to speciality services and administrative systems. This more towards a greater regionalising of healthcare within New Zealand may work against the central concept introduced as part of the Health and Disabilities Act 2000 which set out community centred behaviour benefiting regions (Segall, 2000). Though this idea of greater delegation to smaller regions runs contrary to findings from Saltman (2008) who found that locally administered healthcare systems in Northern Europe

was one of the causes of inefficiency, unacceptable and in many cases costly, duplication. It may be worth noting here the difference within New Zealand of greater regional accountability for healthcare and regionalisation. Regional accountability may be linked to the time when New Zealand had 48 different healthcare systems, each one being accountable to the people in the area the healthcare system managed. Whereas regionalisation may be viewed as a shift towards semi-centralisation where the smaller districts are now being managed and governed by the greater regional areas. With ease of travel between rural areas and the larger cities, and the complexity and costs of managing some the smaller rural hospitals, New Zealand is seeing a shift toward the centralisation of specialist care. Yet the questionnaire result does highlight that a fully centralised system, like the NHS, is not one the clinicians in Christchurch hospital believe would fit within New Zealand. As 85% of clinicians who responded to the questionnaire have worked outside the New Zealand healthcare system, and 75% of those having spent time within the NHS, the question of centralisation or decentralisation would, from a clinical perspective, rule out centralisation along NHS lines. Liesbet and Gary (2003) study on "Unravelling the Central State" would support the idea of a move towards a mixture of central and regional input to governance, but how this multi-layered structure should be constructed is still uncertain. What has been seen since the Second World War is that many healthcare systems around the globe have been moving away from a fully centralised healthcare system towards greater regionalisation (Frankish et al., 2002).

Looking at some of the results on the questionnaire about clinical say on MoH policy, 78% of those who responded believe greater clinical input is required. This was also the case for clinical input at the healthcare management level where 81% of those that responded believe there is a need for greater involvement by clinicians. Regardless of a centralised system run by the MoH from Wellington, or a decentralised regional system, clinicians are very much in favour of greater clinical input to the healthcare system as a whole. Though this input may be better coming from the Council of Medical Colleges rather than individual clinicians.

The question around the leeway the CDHB has when implementing MoH policy gave a response of little (2) to average (3), which may highlight a degree of control by the central MoH over the present regional system. Expanding on this was the question of whether the MoH should have more or less say in how the CDHB is run. The response of those clinicians who answered, 59% said there was presently a balance, 33% believed they should have less influence and only 7% more. Looking at the results from the question on public input to the running of the CDHB, with 59% responding that the public should have greater input to the running of their DHB, this may be viewed as meaning the CDHB should have greater leeway when responding to central policy allowing the CDHB the

flexibility to respond to local conditions. When asked about the impact of MoH decisions on clinical practice 70% of respondents replied with little (2) to no impact (1). This result seems to agree with the findings put forward by Smith (1955, p. 59) that seems are true today as it was over 60 years ago:

> There is almost no administrative routine established in hospitals which cannot be (and frequently is) abrogated or countermanded by a physician claiming medical emergency – or by any one acting for the physician and similarly claiming medical necessity.

If this is still the case, does it matter if the healthcare system is centralised or decentralised? The question of centralisation or decentralisation for the CDHB does seem to suggest that a fully centralised system would not benefit the clinicians. At the same time clinicians do not agree that complete decentralisation is wise which seems to agree with the finding from Siggelkow and Levinthal (2003) that a fully centralised, nor fully decentralised structure results in a high performing healthcare system. Along with this is the view that a fully centralised structure will no longer allow for some form of public participation and in doing so may no longer have the flexibility to cater to local needs (Besley & Coate, 2003). Rico and Léon (2005) seem to summarise this well by saying that presently there is no definite conclusion on which system, centralised or decentralised, is more effective at delivering a national, publicly funded healthcare system.

6.5 Public Participation

The objectives of this section of research was to explore the needs in today's modern healthcare system for public participation. From this study, public participation within the New Zealand Healthcare system is seen as important by the senior clinicians, but 70% of those who responded did so saying that the present Board members ranked as 3 on a rating of 1 to 5, regarding fair representation of the local population. Ninety-six percent of those who responded to question 1.2, did so saying that the Board should represent the local population and that the public must be at the for-front of the New Zealand district healthcare system. This agrees with findings by Barnard (1990), Coffee (1993), Jensen (1989) and Kosnik (1987) that local considerations should be taken into account by having public representation on Boards. Public representation does seem to be viewed as a foundation stone of the New Zealand publicly funded healthcare system, and is echoed by many other counties who also run publicly funded healthcare systems. Yet within New Zealand the Board of the CDHB is accountable in the first instance to the central Government and not the public who voted the for the elected Board members. Because of this dual line of accountability, the Board may

be viewed as a forum rubber stamping central Government directives rather than local representatives promoting local initiatives (Kemp, 2006; Laugesen & Gauld, 2012, p. 141). This view may actively work against the ideal that the general public are at the heart of a publicly funded healthcare system.

From the questionnaire results, 59% of clinicians who responded that the public should have some influence over their DHB and how it is run, but these finding may disagree with those of Mitton et al. (2009) who highlighted that there is as yet, no agreement on when public participation should be sought regarding national or regional healthcare systems. This is backed by findings from Frankish et al. (2002) that there is a lack of evidence to show if public participation is needed within healthcare if central management teams are employed. Renedo and Marston (2011, p. 268) went on to say:

> Community participation is widely thought to be important in the improvement of healthcare delivery and in health equity. Yet there is little agreement about what 'participation' means in practice, or when it might be necessary.

Yet this may contradict the statements by Barnard, Coffee, Jenson and Kosnit that public participation in the healthcare systems allows local considerations to be taken into account (Barnard, 1990; Coffee, 1993; Jensen, 1989; Kosnik, 1987). How the public should be consulted or encouraged to participate is still being debated (Barnes et al., 2003). The present method of public engagement used by the DHB system may have two negative aspects, it may actually dissuade people with the required skill sets from the selection process (Laugesen & Gauld, 2012) and it may be discriminating or actively excluding sections of the public, public participation is supposed to represent (de Freitas & Martin, 2015).

If Pegasus PHOs move towards community Boards working alongside public representatives was viewed in a similar manner as the council of elders proposed by Katz et al. (2000), these community representatives may encourage those within the “special interest” or marginalised groups (Barnes et al., 2003; Pfeffer, 1995) that may be presently excluded within the selection process. But should this council of elders’ system be preferable, then the locally elected Board members’ positions become obsolete.

Public participation is seen as important for the clinicians within the CDHB, but the limitations of this study means greater research is needed before defining how this participation could be changed and if in making any changes to the present participation method would also negate the need for a Board.

6.6 Chapter Summary

Within the opening chapter, Section 1.4 raised four key questions, these were:

- ***Should the system embrace greater centralisation or greater regionalisation?***
- ***Should the healthcare system be administered by a board or management?***
- ***Should the administrative governance team be elected or appointed?***
- ***What degree of public participation should there be within the public healthcare system?***

The next section uses the data and information gathered within this research to answer these questions.

Should the system embrace greater centralisation or greater regionalisation?

As highlighted in Section 3.2.4 "Centralisation or Decentralisation" there is no solid conclusion on which system is clearly better than any other (Rico & Léon, 2005). Centralisation with regional flexibility was the preferred approach in the 1990s (Sah & Stiglitz, 1991), but Magnussen et al. (2007) claimed that since the turn of the century, decentralisation is now seen as the strategy of choice. Many of these strategies are focused on healthcare systems in countries with a far greater population than New Zealand. Regionalisation that may be taking place within areas of Canada, could compare to centralisation within New Zealand. A good example being both Alberta and British Columbia, both of which have populations close to that of New Zealand (Government of Alberta, 2015; Government of British Columbia, 2015). The population of the UK (Office for National Statistics, 2013) another country closely resembling New Zealand with a National Healthcare system, is nearly 14 times as large, runs a centralised system with regional input. Although 74% of the clinicians interviewed having worked within the NHS rated the present DHB regional system of New Zealand far better than the centralised system running in the UK.

Introducing a semi centralised system has the potential to save New Zealand healthcare from the burden of duplication while opening up many areas to greater knowledge sharing within clinical and non-clinical departments, while still offering the flexibility to react to regional issues managed and monitored by region management teams. This may be viewed as a return to centralisation, but for many of the clinical and non-clinical systems and practices, the cost of running many decentralised silos' is creating environments that could result in patients being put at risk.

Should the healthcare system be administered by a board or by management?

The present structural, and management position for the CDHB is perceived as "being in a good place presently" (Anonymous Healthcare Worker #3, 2015). Management are responsive to clinical concerns, though this is always tempered with financial constraints. Management and the Board are seen as aiding clinicians and together are helping to improve the health of the public within the Canterbury district. For the Board, who are the representation of the public, and are an integral part of the CDHB structure, occasionally meeting and talking to the public may help them to better understand some of the frustrations, worries and concerns felt when people find themselves in hospital. For many, a hospital is an alien environment, and can very easily confuse and, or, disorient those that are already feeling a degree of stress (Laugesen & Gauld, 2012).

The views of the clinical staff interviewed is positive with regards to the present Board and management. Working with management and clinical advisory groups has moved the CDHB from "The bad old days" seen in the 1990s to the position today where distributed leadership has helped to improve the overall strengths of the CDHB. To many the CDHB is now a place where "There is no management and clinicians, its clinical and non-clinical working in partnership" (Anonymous Healthcare Worker #4, 2015) and this seems to be one of the keys of success of the CDHB. Asking if the CDHB management could have made these changes without the Board, the answer would seem to be "Yes". Much of the research points to the lack of direction from a public Board, which may mean that many of these administrational changes may have come from the managements teams in conjunction with the clinicians. If the Boards only role today is to represent the public, one question that still seems relevant is whether the makeup of the Board today may have implications for future generations?

Should the administrative governance team be elected or appointed?

There is an overwhelming belief that the Board should represent the local population and that the local population should have a say in how their DHB is run. Clinicians became vague when asked how this can be best achieved, especially if the present method, using the Board system can and does produces a balanced and fair representation of the local population. Boards were founded on the philanthropic style were each hospital had representatives from the local population, but as healthcare areas have expanded, larger areas have amalgamated with those small regions and the number of healthcare boards has been reduced, the ability of Boards to represent the local population has lessened. Since the earthquakes in 2011 the Board of the CDHB has spent more time

on the DHBs financial matters. This may point to a realignment along the lines of a corporate structure and away from the philanthropic style and in doing so the Board may be losing the ability to represent and promote local issues. This may open areas for future work to review how this greater public input to the running or management of the local DHB could be achieved. As highlighted earlier, replicating the move by the Canterbury Pegasus PHO to a fully appointed Board, along the lines of a council of appointed elders put forward by Katz et al. (2000) may seem more appropriate in the new millennium for a secondary healthcare system. A fully appointed board would be able to bring their wealth of experience to the management table and help relive the sense of isolation presently facing senior healthcare management, while at the same time working closer with the community and reengaging with all sectors of the public, thus putting "Public" back into the public healthcare system. But the secondary healthcare system is very different from the primary healthcare system and a solution for one may not benefit the other.

What degree of public participation should there be within the public healthcare system?

With the turn out for the 2013 health Board elections being some of the lowest on record, Board elections may no longer be achieving the desired results gaining public support. Turnout for public healthcare elections in Canada and the UK, two counties that run a similar national healthcare model, are also falling. As the secondary service is a complex and highly specialised area of healthcare, following the lead of Pegasus, the Canterbury PHO, and opting for a fully appointed Board along the lines put forward by Katz et al. (2000), this may resolve the issue presently faced where the pool of elected members often results in a lack of knowledge and required skills to govern some of New Zealand's largest organisation. A fully appointed Board in this manner may work closer with community organisation and in doing so regain public participation that is seen as import by the clinicians. This may see those sections of the community incorporated into the healthcare system that presently excludes them, and may result in a greater involvement of the public within the public healthcare system.

> In an era of medical care delivery systems, there is an increasing need for the patient's voice to be heard, for it to be invited, listened to, and taken seriously (Katz et al., 2000, p. 852).

6.7 Limitations

The focus for this research was on the CDHB for a number of practical reasons. The research was carried out by only one person, expanding this to other hospitals or other District Health Boards was prohibited by time and travel costs. The CDHB is unique in that other DHBs are not likely to operate in the same manner nor have the same managerial challenges. As one of the largest of the 20 DHB's in New Zealand its scope is greater than most of the others, it is more comprehensive in terms of the number of people it might serve, and because of its status as a "super board", in the sense that its administration covers far more ground than just Canterbury and incorporates the activities of smaller, regional boards. Due to the size of the Christchurch Hospital campus, and its association with the Otago School of Medicine, all specialist departments found within the South Island of New Zealand are represented within the Christchurch hospital. Because of this many of the Christchurch clinicians also manage outreach clinic in the other South Island DHBs. Expanding the research and interview schedule to other South Island DHBs may have resulted in duplication as well as a greater degree of data saturation.

6.8 Future Research

One of the contributions of this paper are the questions these findings raise for further research. This has highlighted two distinct areas that could be researched in greater detail.

1. How does public input within a highly complex, highly specialised secondary healthcare system validate public healthcare?

2. Do publicly elected Boards create a level of conflict when they are perceived to validate public healthcare by representing the local public, while contradicting the needs of a Board?

This research has shown that clinicians view public input as being important within a public healthcare service, yet presently the method in place within the Canterbury District Health Board is not viewed as achieving these desired results. The elected members of a DHB Board are seen as the most appropriate manner in which public input to the New Zealand healthcare system can be achieved, the election system is seen by those working within the healthcare service as failing to provide a fair representation of the general public. The elected members of the Board are often viewed by management as failing to provide the required skill sets needed to govern the healthcare system, leaving healthcare management working in a vacuum. There may be a perception that

public input validates a public healthcare system, but this seems to contradict the need for a skilled Board to govern and provide guidance to the healthcare management teams.

Further research could be undertaken looking at a more effective way to gain greater patient and public input to the CDHB. This could centre on the changes made within the primary healthcare sector within Canterbury, as well as looking at how other healthcare organizations around the world have tried to gain public input to healthcare and healthcare management. For any public healthcare system, trying to get the input of the public is a challenge.

If a Board is the desired manner of achieving public input to the local healthcare sector, who are the best people to promote to the Board, and how should they be appointed. Should the appointments be made by a central agency, the likes of the Ministry of Health, or should the senior clinicians and management team have some input to the final decisions.

The creation of a centralised administration systems spanning all DHBs would also allow better access to patient information for those clinicians work in different hospitals or regions. The centralisation of payroll systems, purchasing and distribution also has the ability to save the DHB system money while reducing duplication and waste that may be present in the existing regional system. A centralised administration systems would improve the visibility of clinical and administrative information and thus allow the right information to be presented to the right person at the right time regardless of location. But any more towards greater centralisation with regional flexibility must not be seen as a return to the system in place during the 1990s as this may run the risk of losing the support of the very people who work within the system.

More research is needed on alternative structures that facilitate public input in an effective manner. Lastly the following comment highlights any changes made to the healthcare system must have clinical support.

> Do not change or reorganise for the sake of re-organising as clinical staff are very much against restructures / re-organisation, as this has a tendency to adversely affect patient care (Anonymous Healthcare Worker #5, 2015).

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Appendix A

Questionnaire

Thesis Question

What is the impact of the CDHB structure on the efficiency and efficacy of clinical operations?

Questions

First, I would like to ask you about the CDHB Board and your relationship with it.

1.1 Do you have any synergy with the Board? **No Yes**
If yes, to what benefit? No benefit 1 2 3 4 5 Very Beneficial

1.2 Do you think the Board needs to represent the local population? **No Yes**
Why?

1.3 Do you think the elected Board members are a fair representation of the local population?
Not representative 1 2 3 4 5 Completely representative
Do you think this could be changed and if so how?

1.4 How good is the Board at managing the delivery of healthcare? **Poor 1 2 3 4 5 Excellent**

1.5 Should the Board be primarily concerned with **Supervising** the delivery of Healthcare, **Monitoring** the delivery of healthcare, or **Something else**?

1.6 Do you think the Board enhances efficient practice of the CDHB? **No Yes Don't Know**
If yes, how: If not why not?

1.7 Do you think the governance role should be performed by elected locals, or appointed experts **Elected Appointed Both Not at all**
Why?

1.8 Do you think the governance role should be performed by a Board or management?
Board Management
Why?

1.9 Do you think the governance role should be performed locally or centrally?
Locally Centrally Both
Why?

Next I would like to ask you about the CDHB management

2.1 Do you meet with CDHB management? **No Yes**
If yes, how often? Daily Weekly Fortnightly Monthly Quarterly Longer
If yes, about what? Clinical Operational Personnel Something else

2.2 How effective is DHB management at the delivery of Healthcare to Canterbury?
Not effective 1 2 3 4 5 Very effective

2.3 Do you think the present management structure is effective managing clinical operations?
Not effective 1 2 3 4 5 Very effective
Do you think this could be changed and if so how?

2.4 Do you think clinician's should have a greater role in Healthcare management? **No Yes**
If yes, why: If no, why not?

2.5 In your experience, are management responsive to clinical concerns?
Unresponsive 1 2 3 4 5 Totally responsive

2.6 Do you think Healthcare for Canterbury should be managed locally, or centrally
Locally Centrally Mixed
Why?

Next I would like to ask you about the Ministry of Health

3.1 How much influence do you have on healthcare policy created by the MoH?
No influence 1 2 3 4 5 Great Influence

3.2 Do you think clinician's should have a greater say in MoH policy decisions? **No Yes**
Why?

3.3 How much leeway does the DHB have when implementing MoH policy?
None 1 2 3 4 5 Great Leeway

3.4 Do you think the MoH should have less, or more say in how the CDHB prioritises clinical initiatives? **Less More There is a balance at present**

3.5 How much impact does the MoH have on your clinical decisions?
None 1 2 3 4 5 complete control

Next I would like to ask you about Public Engagement

4.1 Should the public have any influence in how their DHB is run?

No influence 1 2 3 4 5 Great Influence

Do you think this could be changed and if so how?

4.2 Do you think the Board chamber is the best place for a public debate on healthcare?

No Yes

Next I would like to ask you about your experience of different Health models

5.1 Have you worked solely in New Zealand? **No Yes**

Yes go to 5.2

Where else have you worked _____

Compared to the counties you have worked in:

Which healthcare model is better suited to you _____

How does the DHB model compare **Less effective 1 2 3 4 5 Very effective**

5.2 How effective is the DHB model at delivering optimum healthcare for Christchurch?

Not effective 1 2 3 4 5 Very effective

Do you think this could be changed and if so how?

Finally, I would like to ask a couple of personal questions

6.1 How old are you **_____ years**

6.2 What ethnic group do you identify with? **_____**

6.3 Gender Male Female

6.4 In what country did you first qualify as a Doctor **_____**

6.5 How long have you worked for the CDHB? **_____ years**

Conclusion

This completes our interview.

Thank you for taking the time to answer these questions.

Do you have any comment you would like to add?

Appendix B

Invitation to Participate

CONFIDENTIAL

(Name of Participant)
(Title/Position)
(Specialty)
Christchurch Public Hospital

Date (DD MM YYYY)

Dear (Prof. Dr. Mr. Mrs.)

Invitation to Participate in Master Research

I am seeking your assistance with my study on the relevance of the Board to the efficient and efficacious clinical operation of Canterbury District Health, as part of my Master's Degree in Commerce and Management at Lincoln University.

By interviewing Senior Medical Officers from the majority of the specialist areas within the Christchurch Hospital, this study aims to gain a better understanding of the relevance of a Board viewed by the clinician's. How the Board may affect the specialist departments within the hospital, and if the Board is in fact still required in the modern health system with moves towards greater regionalisation, and a perception of centralisation within healthcare management.

Further information about the research is attached in the following three documents:

Research information sheet for participants

Interview schedule

Consent form

Proposed benefits of the research

This research provides an opportunity for clinicians to make comments regarding the relevance, practicality and operational effectiveness of the Board of the CDHB from their perspectives and based on their practical experience. It is hoped that the results of this study will be of benefit to District Health Board management, the Government, and other key stakeholders, all of whom are concerned in one way or another with Government policy in healthcare management.

The interview procedure

Participation involves an interview of about half an hour to an hour, on an agreed date and time in November or December. The information you provide will be kept strictly confidential and your anonymity with your answers will be preserved. Your transcript will be assigned a random four-digit code. The list associating your name with the code will be stored in a secure and separate location and no one other than the researcher will have access to this list. Once the data collection and quality control processes are complete, the list will be destroyed.

Participation

If you agree to be interviewed, please complete and sign the consent form and return it to me before (the end of) October 2014 in the envelope provided.

I will contact you to arrange an interview time and place after receiving your consent form.

If you have any questions or would like further information, please contact me on mobile 0274 792 894 or by email at sheardd@lincoln.an.nz

Alternately you may contact my supervisor Dr Greg Clydesdale at Greg.Clydesdale@lincoln.ac.nz or my associate supervisors Dr David Cohen at David.Cohen@lincoln.ac.nz or Dr Gillis Maclean at Gillis.Maclean@lincoln.ac.nz

I look forward to hearing from you and thank you in advance for your support.

Yours sincerely,

John Sheard

MCM Student
Commerce Division
Lincoln University

Appendix C

Research Information Sheet

Lincoln University

Commerce Division

Research Information Sheet for Participants

You are invited to participate as a subject in a Commerce Master's thesis project entitled:

What is the impact of the CDHB structure on the efficiency and efficacy of clinical operation?

The aim of this project is to gain a better understanding of the relevance of a Board. How the Board may affect the specialist departments within the hospital, if the Board is in fact still required in the modern health system. With moves towards greater regionalisation and a perception of centralisation within healthcare management, is a local Board irrelevant.

Your participation in this project will involve an interview that is estimated to take between half an hour, to an hour of your time.

Background to the research

Upon entering power in 1990, National drew up bold plans to reform not only the health sector, but also the welfare state. Between December 1990 and July 1991, actions were taken to see the dismantling of the Area Health Boards, and replace these with a system of competing hospitals. This introduction of hospital competition was expected to reduce the role of Government in the health system, while increasing efficiency, proving a greater choice to the general public, while also increasing hospitals responsiveness to the consumers. The Honourable Simon Upton, Minister of Health, introduced the health reform bill on the 30th July 1991; the day after the Government had removed all the health systems elected Boards. For the first time in healthcare history, all hospitals in New Zealand now operated without a Board.

This decision to centralise the health system was eventually overturned in 2000, after the Labour Party, led by Helen Clarke, managed to out poll National 38% to 30%. The incoming Labour / Alliance Government reintroduced locally elected Boards back into the health system governance model. At the time, the Labour led Governments rational for decentralising the health system was

the same message used for the past 100 years. 'Local decision making structures facilitates closeness to the community' (Gauld, 2001).

The results of the project will be published and data may be used in future research. If you answer the interview questions it will be understood that you have consented to participate in the project and consent to publication of the results of the project with the understanding that anonymity will be preserved. To ensure anonymity and confidentiality the following steps will be taken:

At no stage of the interviews will any participant be identified.

Participation is voluntary and you may withdraw your participation at any time prior to the completion of the interview. Once the interviews are complete it will not be possible to withdraw as all interviews are anonymous.

You do not have to answer any question that you do not wish to.

The project is being carried out by John Sheard, a postgraduate student from the Commerce Division at Lincoln University. He will be pleased to discuss any concerns you have about participation in the project. Contact details are: mobile 0274 792 894 or via email to sheardd@lincoln.ac.nz

Supervisors for this research are Dr Greg Clydesdale Greg.Clydesdale@lincoln.ac.nz, with associate supervisors, Dr David Cohen David.Cohen@lincoln.ac.nz and Dr Gillis Maclean Gillis.Maclean@lincoln.ac.nz

Appendix D

Interview Schedule

What is the impact of the CDHB structure on the efficient and efficacious clinical operation?

Pre-interview Information

Interviewer: John Sheard

Date of Interview: _____ Time of Interview: ____h:____m

Interview Location: Christchurch Public Hospital or The Boatshed café

Gender: Male Female

Introduction
Hi… This study focuses on the relevance of the Board for the District Health Board structure, with emphasis placed on Christchurch hospital. In particular, I am interested in the clinician's view regarding the Board, its relevance, and operational practicality, and what the impacts are on the day to day working environment for clinician's since the Board was re-introduced in 2000.

Purpose
The information from this interview will be very helpful in gathering data on perceptions of the relevance of a Board from a clinician's perspective, and will be a key part of my research. The information you provide will be held in the strictest confidence, and only used for this research.

I would like to record the interview on tape to speed up the note-taking procedure. The tape will simply have a number to identify who was interviewed and will be destroyed after the data has been analysed. Are you happy with this?

Instructions
I'd like to ask you some questions about the role of the District Health Boards Board of governance. What, if any, form of governance the Board play within the District Health Board? How much leeway the Board have when dealing with national health directives? Do you think this type of governance is till relevant given your experience in healthcare? Do you believe the Board has any relationship to local population?

Appendix E

Consent Form

Name of Project:

What is the impact of the CDHB structure on the efficient and efficacious clinical operation?

I have read and understood the description of the above-named project. On this basis I agree to participate as a subject in the project. I understand that participation will involve an anonymous interview that will be tape recorded. I consent to publication of the results of the project with the understanding that anonymity will be preserved. I understand that I may not withdraw my consent once the interview has been completed.

Name: _____

Email Address: _____

Contact Telephone Number: _____

Signed: _____

Appendix F

Prompt Cards

1.1

Do you have any synergy with the Board?

No benefit 1 2 3 4 5 Very Beneficial

1.2

Do you think the Board needs to represent the local population?

No Yes

1.3

Do you think the elected Board members are a fair representation of the local population?

Not representative 1 2 3 4 5 Completely representative

1.4

How effective is the Board at managing the delivery of healthcare?

Poor 1 2 3 4 5 Excellent

1.5

Should the Board be primarily concerned with **Supervising** the delivery of Healthcare,

Monitoring the delivery of healthcare, or **Something else**?

1.6

Do you think the Board enhances efficient practice of the CDHB?

No Yes Don't Know

1.7

Do you think the governance role should be performed by elected locals, or appointed experts?

Elected Appointed Both Not at all

1.8

Do you think the governance role should be performed by a Board or management?

Board Management

1.9

Do you think the governance role should be performed locally or centrally?

Locally Centrally Both

2.1

Do you meet with CDHB senior management?

If yes, how often?

Daily Weekly Fortnightly Monthly Quarterly Longer

If yes, about what?

Clinical Operational Personnel Something else

2.2

How effective is DHB management at the delivery of Healthcare to Canterbury?

Not effective 1 2 3 4 5 Very effective

2.3

Do you think the present management structure is effective managing clinical operations?

Not effective 1 2 3 4 5 Very effective

2.4

Do you think clinician's should have a greater role in Healthcare management?

No Yes

2.5

In your experience, are management responsive to clinical concerns?

Unresponsive 1 2 3 4 5 Totally responsive

2.6

Do you think Healthcare for Canterbury should be managed locally, or centrally?

Locally Centrally Mixed

3.1

How much influence do you have on healthcare policy created by the MoH?

No influence 1 2 3 4 5 Great Influence

3.2

Do you think clinician's should have a greater say in MoH policy decisions?

No Yes

3.3

How much leeway does the DHB have when implementing MoH policy?

None 1 2 3 4 5 Great Leeway

3.4

Do you think the MoH should have less, or more say in how the CDHB prioritises clinical initiatives?

Less More There is a balance at present

3.5

How much impact does the M.o.H. have on your clinical decisions?

None 1 2 3 4 5 complete control

4.1

Should the public have any influence in how their DHB is run?

No Influence 1 2 3 4 5 Great Influence

4.2

Do you think the Board chamber is the best place for a public debate on healthcare?

No Yes

5.1

How does the DHB model compare to other healthcare systems?

Less effective 1 2 3 4 5 Very effective

5.2

How effective is the DHB model at delivering optimum healthcare for Christchurch?

Not effective 1 2 3 4 5 Very effective

Simple pictorial layout for the Likert scale questions.

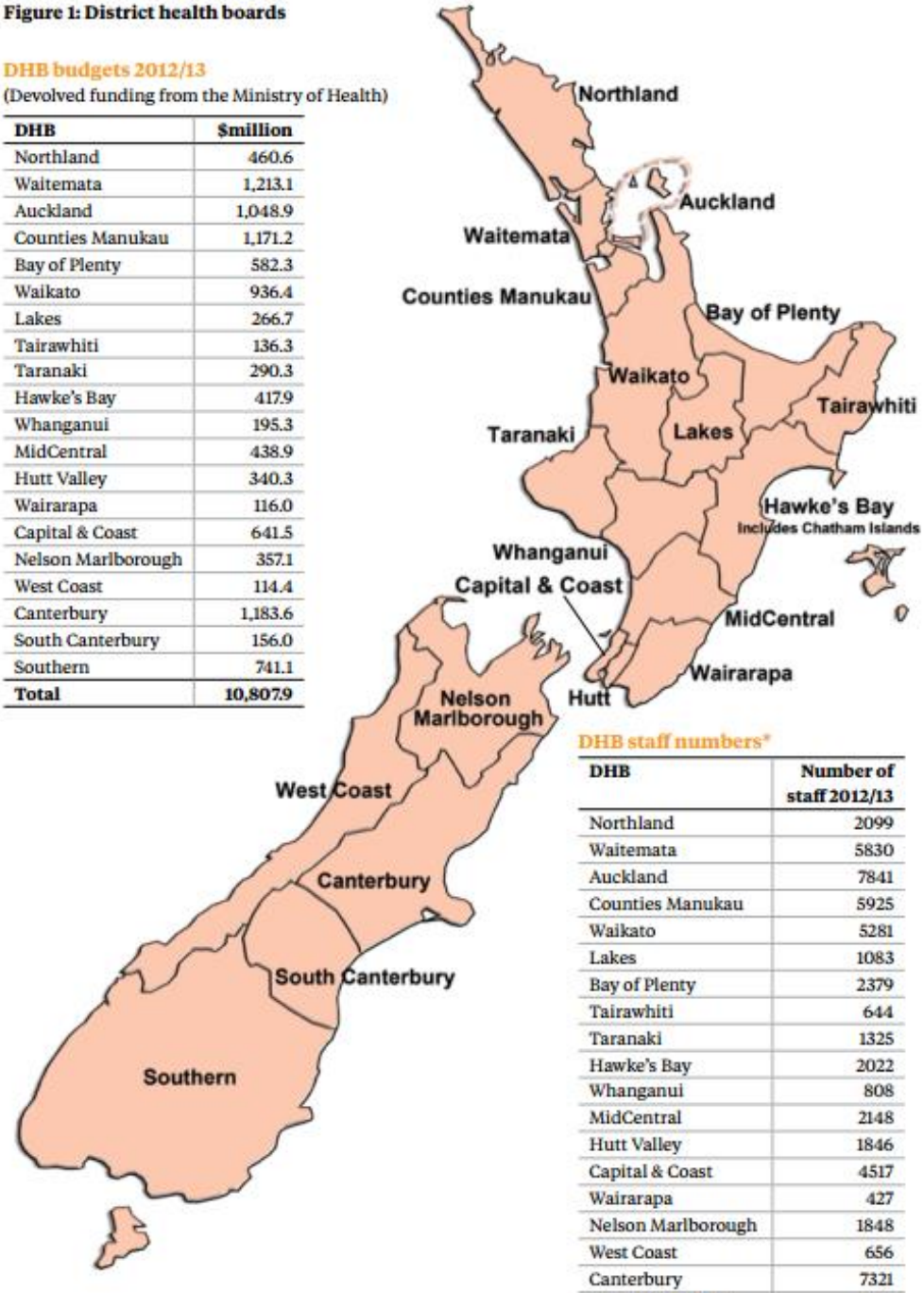
1	2	3	4	5
Poor	Fair	Average	Good	Excellent
Never	Seldom	Sometimes	Often	Always

Not Effective . . . . . Very Effective

Appendix G

DHB Facts and Figures

Figure 1: District health boards



DHB budgets 2012/13
(Devolved funding from the Ministry of Health)

DHB	$million
Northland	460.6
Waitemata	1,213.1
Auckland	1,048.9
Counties Manukau	1,171.2
Bay of Plenty	582.3
Waikato	936.4
Lakes	266.7
Tairawhiti	136.3
Taranaki	290.3
Hawke's Bay	417.9
Whanganui	195.3
MidCentral	438.9
Hutt Valley	340.3
Wairarapa	116.0
Capital & Coast	641.5
Nelson Marlborough	357.1
West Coast	114.4
Canterbury	1,183.6
South Canterbury	156.0
Southern	741.1
Total	**10,807.9**

DHB staff numbers*

DHB	Number of staff 2012/13
Northland	2099
Waitemata	5830
Auckland	7841
Counties Manukau	5925
Waikato	5281
Lakes	1083
Bay of Plenty	2379
Tairawhiti	644
Taranaki	1325
Hawke's Bay	2022
Whanganui	808
MidCentral	2148
Hutt Valley	1846
Capital & Coast	4517
Wairarapa	427
Nelson Marlborough	1848
West Coast	656
Canterbury	7321
South Canterbury	665
Southern	3638
Total	**58,302**

*Based on accrued full-time equivalents (FTEs) as at 30 April 2013.

(Ministry of Health, 2013)